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ABSTRACT

This handbook is designed to aid vocational education staff who are producing student learning guides for competency-based vocational education (CBVE). In the handbook, the basic considerations in developing each component of a learning guide are explained. In addition, specific and concise guidelines for writing each component are given, and samples are provided. Topics covered in the guide include steps in developing a learning guide, writing competency statements, performance objectives, enabling objectives, word lists for performance objectives and performance enablers, and the components of a learning guide, with instructions for preparing each component. Also included in the guide is a glossary of CBVE terms, a style sheet for writing learning guides, troublesome words used in learning guides, and a sample of a complete learning guide.

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HOW TO WRITE LEARNING GUIDES FOR COMPETENCY-BASED VOCATIONAL EDUCATION: A DEVELOPERS' HANDBOOK

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FOREWORD

In its comprehensive effort to install the competency-based approach in all its vocational education programs, the Orange County School System has made a commitment to produce individualized learning guides as an integral part of its program. A special task force investigated the problems involved in producing student learning guides and reviewed some alternative solutions. After considerable study, it was decided that a standard countywide format and developmental process had considerable merit, and a special format and production process have been adopted.

This handbook is designed to aid vocational education staff who are to be involved in the production of student learning guides. A staff member may serve in the role of primary writer, editor, vocational teacher of the target program, media specialist, or production worker. All will need to understand the format and structure of the guides, and will need to develop skill in designing and producing these crucial documents.

In this handbook the basic considerations in developing each component of a learning guide are explained. In addition, specific and concise guidelines for writing each component are given. The handbook is designed to be used as a training resource for developers of learning guides, and as a ready reference, to be consulted as questions and problems arise in the developmental process. While the handbook is meant to serve the immediate needs of Orange County School System staff, others who are working to produce competency-based instructional materials may also find it helpful. Although the learning guide format alluded to here is unique to the Orange County Schools, the elements are familiar to all who are experienced in CBVE, and the information presented in this handbook can be applied to similar learning guide formats without difficulty.

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INTRODUCTION

You are part of a revolution! Great changes are taking place in vocational education that will make it much stronger, better able to produce well trained workers, and more responsive to the rapidly changing needs of business, industry, and community services. We refer, of course, to the change toward competency-based vocational education (CBVE).

You may well be familiar with these basic principles of CBVE:

- Training is based on carefully identified competencies and made public in advance of instruction.
- Criteria for assessing achievement are based on occupational standards and are known to students in advance.
- The instructional program provides for individual development and evaluation of each specified competency.
- Assessment uses the actual performance of each competency as the primary source of evidence of achievement.
- Students go through the instructional program at their own best rate by demonstrating attainment of specified competencies.

Now you are going to help put these abstract principles into actual practice. As one who is involved in the development of instructional materials for CBVE, you are going to have a significant impact on the training of boys and girls, men and women in many competency-based classrooms and laboratories. Your input is vital because the CBVE approach to instruction is greatly dependant on high quality instructional materials, and in fact the system could not begin to reach its potential without them.

This handbook is designed to help you develop those instructional materials, whether your role is that of a primary writer, vocational instructor, editor, or media specialist. In particular, this handbook is focused on producing learning guides; efficient instructional documents meant to be placed in the hands of students. Learning guides may be small in size, but they loom large in importance in CBVE because it falls on them to take major responsibility for routine instruction, guiding the student to successful achievement of each occupational competency.

Importance of doing the job well. Learning guides for CBVE can only be as effective as the people who are developing them are well prepared. As a learning guide developer you have three responsibilities in this regard: (1) you should be thoroughly conversant with the important principles and best practices of competency-based instruction, (2) depending on your role, you must have a good grasp of the occupation for which you will be preparing guides, and (3) you need to be skilled in the use of learning guide structure and format so you can devise guides that will in fact help students learn.

It is to the latter point that this handbook is directed. In it you will find descriptions of the purpose of each section of a learning guide and guidelines for constructing that section. Throughout you will be given examples of the ways in which to handle the many details that go into a successful guide. You will get acquainted with the accepted format of a guide so you can utilize what has already been designed, concentrating your efforts on the instructional content rather than the form. It is recommended that you first read this handbook through, then keep it nearby for ready reference as you work on your learning guides.

Don't be surprised if your first attempts at guide development seem arduous and take a lot longer than you expected. Smoothness and facility will come shortly. Be satisfied only with your best effort. Students are depending on you to give them the information they need in order to learn. Instructors are depending on you to furnish them the tools they need to do the job. And schools are depending on you to produce quality materials they can use for some time to come, and of which they can be justly proud.

LEARNING GUIDES IN COMPETENCY-BASED VOCATIONAL EDUCATION

Competency-based vocational education depends very heavily on high quality instructional materials. Without good materials the CBVE approach, no matter how great its potential, would simply not be able to function well. Highly structured, well conceived, and carefully developed materials are needed in order to make the complex activities of CBVE effective and efficient.

It is theoretically possible for an instructor to deliver competency-based instruction using traditional group methods, conventional textbooks, and final examinations, but CBVE would soon break down in actual practice. After the first lesson or two some students would be ready to move ahead, but a few would still not have mastered the earlier skills. Then the instructor would be faced with the old dilemma—Should the whole group be held up until the slowest students achieve the skill?—Should the next competencies be attacked when the fastest students are ready for them?—Or should the pace be determined by the average group? Fortunately, individualized learning guides solve that problem.

By using printed learning guides or modules the fastest students can move ahead when they are ready to do so, and the slowest can be given the time they need to master one task before attempting the next one. Because the great majority of routine teaching is taken over by the instructional materials, the instructor is free to work with individuals and small groups when they need help.

A learning guide is a set of directions. It is a cookbook that provides recipes for learning. It is a road map that shows students how to get from where they are to where they want to be—employed and skilled workers in their chosen occupation. It tells students about sources of information, and where to find them. It describes how they can practice the skill they are trying to learn. And it very clearly lists the standards of performance on which they will be judged.

Learning guides are locked onto the vocational training program's verified list (or chart) of occupational competencies. A separate learning guide is written for each one of the competencies on the chart, and its sole function is to help students achieve that competency. If there are 150 occupational competencies in a particular vocational program, 150 learning guides are needed to deliver instruction.

Learning guides are thin little documents. Every word counts. They usually don't contain much information themselves, but they tell the student where information is available. Instructional modules, on the other hand, are somewhat more fat and sleek. They are basically self-contained; i.e., they include all the information a student is likely to need to achieve the competency. You are going to be developing learning guides because they are easier and quicker to write, they can be revised and updated readily, and they are vastly less expensive to produce. What's more, students like them, and they work.

Typically, in a CBVE program the learning sequence goes something like this. The student, Thomas Tyro let's say, reviews the chart of competencies for the program he's in and selects the next one to work on. He picks up a copy of the learning guide for that competency and looks it over, reading the introduction and objectives. Then he begins working on selected learning experiences; you might find him working in the resource center, up in the library, or out on the laboratory floor. When he gets done with the first enabling objective Tom completes a self-check of knowledge to find out whether he's ready to go ahead with the lab work described in the learning guide. As Tom goes through this next set of experiences he might be operating a machine in the lab, looking at a videotape in the resource center, or out in the community interviewing an employer. Usually, his learning guide is right there with him. Once or twice he goes to his instructor for some special help on a tricky bit.

About this time, Tom Tyro carefully goes through the items on the final performance checklist in the guide and decides he is ready for his instructor's assessment. Tom and his instructor arrange when the performance test will take place. At the appointed time the instructor opens his copy of the learning guide to the final checklist and rates Tom on each standard as the student goes through the new skill he's learned. Not at all surprised by the fact that he gets a satisfactory rating on every item, Tom goes back to the competency chart and looks for the next one to conquer. He knows, however, that if he hadn't succeeded in his first attempt he would have had to do some more of the learning activities in the guide and gone through the performance test again.

Of course there are a thousand variations of the scenario you've just seen, but the basic ideas are still there. The learning guide is the structure on which the whole program depends. It has to be right, and it has to be easy to use, both for the student and instructor.

You can easily see the benefits to instructors and students. The instructor spends less time in routine group teaching, more time working with individual students and small groups that need his/her help. By using the checklist during the observed performance test, the instructor knows that the student can really perform that skill up to occupational standards. Students, for their part, know exactly what is expected of them and what they must do to achieve the competency. They are responsible for their own learning, and never need fear getting left behind or having to wait and waste time while others catch up. Good learning guides help learning take place, and make it possible for CBVE to function.

GLOSSARY OF CBVE TERMS
RELATED TC LEARNING GUIDES

It is important that all writers of learning guides use the same CBVE terminology in the same way. This will help maintain consistency and high quality throughout the materials, and will make it easier to use the learning guides in all schools.

The following glossary of terms relates to competency-based learning guides. The terms have been selected from the CBVE Glossary produced by the Orange County Public Schools.

1. Affective Objectives: those that emphasize a feeling or attitude such as receiving stimuli, responding to stimuli, valuing, organizing, and characterizing (HEMP, undated).

2. CBVE: abbreviation for competency-based vocational education.

3. Cognitive Objectives: those that include mental processes and activities such as knowledge, comprehension, application, analysis, synthesis, and evaluation (HEMP, undated).

4. Common-Core Competencies: those competencies which are common to and are required to be achieved in more than one course.

5. Competency: knowledge, skills, abilities, and attitudes required for a student to succeed at a particular occupation.

6. Competency-Based Instruction: based on achievement of competencies needed to perform a particular job successfully.

7. Competency-Based Vocational Education - CBVE: a means of instruction which:

   a. identifies the competencies needed for on-the-job performance.

   b. informs students and instructors of the precise and detailed learning objectives required to achieve these competencies.

   c. emphasizes high performance standards in testing, course requirements, and/or graduation.

   d. individualizes learning by letting each student work at his/her own speed and achieve each competency before going on to another (Turlington, 1976).

8. Competency Sheet: an element of the CBVE management system that is prepared for each program competency; it contains identification data, performance objectives, performance enablers, and other information.

9. Course: an organized plan of instruction.

10. Criterion-Referenced Test: a test that is composed of criterion-referenced measures and that compares the level of performance to the standard stated in the objective; shows when the student has achieved a specific performance objective (Mills, 1976).

11. Duty: a distinct grouping of tasks (competencies) which are related to each other by the nature of the work to be performed (Mills, 1976).

12. Employability Skills: those nontechnical, cross-vocational skills related to gaining and maintaining employment. These skills include such abilities as locating and selecting an appropriate occupation, applying for jobs, accepting job responsibilities, and maintaining good relationships with supervisors and co-workers on the job (Mills, 1976).

13. Enabling Objective/Enabler: an objective that identifies one thing the student must be able to know or do in order to perform the unit objective successfully. Also often called lesson-sized objective or sub-objective (Turlington, 1976).

14. Evaluation: for instructional systems, both internal and external evaluations are conducted:

    a. Internal Evaluation: a procedure in which learner competence is measured by criterion-referenced measures or performance objectives to determine the effectiveness or lack of effectiveness of an instructional product or process, and then to improve the product or process for maximum effectiveness.

    b. External Evaluation: an assessment of graduates of an instructional system conducted to determine whether or not that system is producing entry-level workers with appropriate and adequate job skills (Mills, 1976).

15. Feedback: information which results from or is contingent upon an action. Although feedback may indicate the correctness of an action, such as a test result, the evaluative aspect of feedback is not necessarily implied. In many learning situations, the nature, proximity, distribution, and source of feedback are important determinants of successful learning (Mills, 1976).

16. Field Test: tryout of instructional processes and/or materials on a representative sample of the target population. Field testing is central to the validation of instruction which includes development, field test, and revision (Mills, 1976).

17. Formative Evaluation: a process designed to obtain data for instructors to use to increase the efficiency and effectiveness of instructional materials. It includes one-on-one clinical evaluation, small group evaluation, and field evaluation (Dick, 1978).

18. Individualized Instruction: a learner-centered mode of instruction in which criteria for making instructional decisions derive from the special goals, objectives, and characteristics of individual learners. Individualized instruction employs continuous monitoring of student performance as the basis for initiating changes in the events and activities of instruction (Mills, 1976).

19. Instructor: a learning manager, resource person or consultant; manages student learning activities and serves as subject matter expert; conducts student evaluation activities; designs learning activities to meet individual student requirements. In the CBVE system, the term "Instructor" is used in lieu of "Teacher."

20. Learning Activity: a learning event, whether it is presented by an instructor or is self-instructional, that is designed to achieve a learning objective. A learning activity may consist of a wide variety of instructional means, e.g., textbook, project, media, field trips, workbook, guest speaker.

21. Mastery: used synonymously with achieve and attain.

22. Media: instructional media are the delivery systems which transmit the content of the learning competency to the individual learner. Broad classes of media are audio, actual objectives, human interaction, motion visual, still visual, and print (Mills, 1976).

23. Occupational Proficiency Performance Standard: a document under development by the State Division of Vocational Education for each program area to identify the entry-level skills required for workers to perform effectively (Jeffries, 1980).

24. Performance Enabler: see enabling objective/enabler.

25. Performance Objective: a statement of exactly what the learner must do, in observable and measurable terms. A performance objective is the same as a behavioral objective and contains the following parts:

    a. Performance: "Does what?"

    b. Conditions: "Given what?"

    c. Standard: "How well?" (Turlington, 1976).

26. Performance Test: See criterion-referenced test.

27. Post-Test: a test given after the instructional sequence to determine student achievement of the objectives and/or the effectiveness of the instruction (Mills, 1976).

28. Pre-Test: a test used before instruction to determine whether an individual possesses certain behaviors needed to perform in a course of instruction and/or see if the individual already possesses some of the behaviors to be instructed. Pre-test results can be used to branch or bypass instruction in an individualized system (Mills, 1976).

29. Program: a course or courses related to a specific occupational area.

30. Psychomotor Objectives: those that include manipulative skills and are motor or muscular skills such as to operate, to adjust, to mix, to prepare, to design, to build (Hemp, undated).

31. Sequence: refers to the successive ordering of instructional activities and experiences. Consideration of the performance to be learned, the characteristics of the learner, and the type of learning involved influence the selection of an approach to sequencing (Mills, 1976).

32. Skill: may be categorized into intellectual or motor skills:

    a. Intellectual Skills: symbolic activities or operations such as discriminating, chaining, classifying, rule using, and problem solving.

    b. Motor Skills: involve sequentially executed complex combinations or coordinated motor chains (Mills, 1976).

33. Student Learning Guide: an instructional packet that guides each student individually through the learning process to achieve the course competencies.

34. Task: used synonymously with competency.

35. Teacher: see instructor.

36. Technical Job Skill: an ability to perform a discrete competency; those critical job skills that are required by a person who is to perform a particular occupation and which may be identified by performing a job competency analysis.

STEPS IN DEVELOPING A LEARNING GUIDE

There is probably no completely right or wrong way to go about the task of developing a learning guide for CBVE. Every individual has his or her own favorite method of working. However, there is a sequence of steps that many guide writers have found to be efficient of time and effort, and that produce quality results. These steps are set down here with the recommendation that you follow them until such time as you may develop your own style.

STEP 1. Get a good mental fix on the competency for which you're going to produce the learning guide. Examine the competency statement closely, determine exactly what it means (and what it does not mean) and what its limits are. Look at its relation to other competencies in the program. You may need to do some reading to clarify your thinking on these points.

STEP 2. Develop the performance objective. Decide what you want the student to do to demonstrate his/her achievement of the target competency.

STEP 3. Research the topic thoroughly, even if you think you are very familiar with it. Reread standard sources, locate special references and new information, and in general bring your knowledge up to date.

STEP 4. Develop or refine the enabling objectives. Determine the extent of the cognitive, or knowledge component of the competency. Devise enabling objectives for the practice component.

STEP 5. Locate media materials that may be included as learning experiences. Preview them carefully for suitability.

STEP 6. Develop learning experiences for each enabling objective. Decide on the specific experiences you want students to have, then carefully sequence them. Add any needed special instructions.

STEP 7. Construct the knowledge test for the cognitive component of the competency if such a test is necessary. Prepare an accurate answer key.

STEP 8. Produce instruction sheets. Use existing materials or develop new ones to fill in gaps you have discovered in the printed resources. Devise projects and laboratory exercises if these are appropriate.

STEP 9. Develop the self-checks. Determine which enablers would benefit from self-checks, select the appropriate form of self-check, and write the items and model answers.

STEP 10. Develop the final performance test and the performance standards. You may wish to have another vocational teacher in the occupational program review and critique the standards.

STEP 11. Write the introduction. At this point you will know what points to stress, and how best to interest the student.

STEP 12. Edit and polish the entire guide. Review the guide first for correct format and structure. Go through it again for grammar, usage, and style. Finally, check it once more for correct spelling, punctuation, and capitalization.

WRITING COMPETENCY STATEMENTS

Structure of a Competency Statement

A competency may be defined as a meaningful unit of work that is discrete, observable, and performed within a limited period of time. It leads to a product, service, or decision. The terms, skill and task are also often used interchangeably with competency. It might be said that competencies are things the worker is paid to do on the job. Competency statements are concise descriptions of units of work done as the worker functions in his/her occupation.

The competency statement must be as clear as possible so that it is easily and accurately understood by workers and teachers in the occupational area. The terminology used must be consistent with current occupational usage, and must be unambiguous so that all workers may be able to apply the same interpretation.

You should keep in mind that competency statements are to be used for training workers and for supervising workers as they perform on the job. A statement that is too general (e.g., "Meet the public") may be quite useless as a guide for planning instruction or evaluating performance. Competencies that are extremely specific, or even trivial (e.g., "Count nuts and bolts") may require no special training procedures, or may involve very short bits of training time and therefore may not be helpful.

The components of a standard competency statement are:

VERB

The verb must be in the first person singular, active voice. (e.g., select, prepare, maintain, direct, organize, produce)

OBJECT

The "object" is the thing acted upon by the worker. (e.g., tools, equipment, records, customers)

QUALIFIER

Qualifiers are words or phrases used to limit or modify the competency statement. (e.g., "according to procedures manual," "every month," "using hand tools")

Examples of the parts of competency statements are:

1. Prepare budgets
   (verb) (object)

2. Maintain sickroom equipment
   (verb) (object)

3. Select construction materials in accordance with local codes
   (verb) (object) (qualifier)

Guidelines for Writing Competency Statements

a. The competency statement begins with an action word in the present tense (e.g., design, construct, operate, repair, assist). Watch out for verbs that denote school requirements (e.g., list, explain, describe, know); these are not occupational competencies.

b. The prefix, "The worker is able to..." is understood, not written. Including such phrases simply clutters up the statement and does not add any information.

c. Each competency statement must describe an observable behavior. Thus, knowledge and responsibility items, beginning with phrases such as "Know the principles of...," "Understand the implications of...," "Be aware of...," "Be responsible for..." are not permissible.

d. Worker attitudes are not competencies or skills, though positive attitudes may be necessary if the competency is to be performed in an acceptable manner. Thus, attitudinal items such as "Enjoy meeting the public," or "Be alert," are not permissible.

e. Receiving instructions from others should not be considered a competency. Thus, attending meetings or conferences are not competencies. Neither is "Receive orders from supervisor."

f. Avoid statements such as "Be available when required for emergencies," or "Relay forms." If a skill is not involved, it is not a competency.

g. Avoid verbs that are indefinite as to meaning, such as "Work with...," "Handle..." and "Be responsible for..." If a person "works with" a program or resource, it should be determined what is actually being done when the activity takes place. There may actually be several competencies involved.

h. Competency statements should represent independent skills and not simply supplement or expand on others. (e.g., "Prepare daily work schedules" should not be used to supplement "Prepare work schedules.")

i. In general, avoid multiple verbs in a competency statement, unless several actions are always performed together. If two action words are needed, this usually indicates two skills are involved.

j. Do not include words such as "effectively," "carefully," or "thoroughly" (as in "Use communications effectively" or "File materials carefully"). It is understood that workers are not going to be trained to be ineffective or careless.

k. The use of qualifiers is optional. Qualifiers should be used only when necessary to clarify the meaning of the competency. Avoid redundant qualifying phrases such as "when appropriate," "as required," or "in accordance with regular procedures."

l. Each competency statement must be capable of standing alone. A statement such as "prepare other materials" might appear to be reasonable if it appears at the end of a series of related competencies, but it cannot be understood by itself so it should not be used.

m. Repetition is acceptable. If "operate" is the appropriate verb for many competency statements, use it. Do not attempt to find alternatives simply for the sake of style.

n. Each competency statement must be a complete sentence. Single words or short phrases without action verbs (e.g., "Daily schedules," "Bedmaking," or "State safety reports") are topics that may mean something to the writer, but do not clearly communicate what it is the worker does on the job.

o. Short words should be used in preference to long words or expressions. (e.g., "Maintain a filing system," NOT "Take necessary action relative to setting up a system for the storage and retrieval of records and instructional materials."

p. Avoid the use of "etc." If an additional thought needs to be included, express it. (e.g., NOT "Maintain a system for controlling dangerous substances, etc.", but "Maintain a security system for controlling the use of drugs and hazardous equipment."

q. Abbreviations should not be used. Spell out all words so anyone can understand the statement, not just workers in the occupation.

r. Negative statements are seldom valid (e.g., "Do not use profanity on the job," or "Avoid talking to outsiders about company policy"). Not doing something is hardly a trainable skill.

PERFORMANCE OBJECTIVES

A performance objective needs to be written for each learning guide. It describes in a few words what you want the trainee to be able to do when he/she completes the learning guide and is ready to demonstrate the particular occupational competency of the guide.

The performance objective is the school counterpart to the occupational competency statement. It focuses on what the student is expected to achieve in the training program, while the competency statement describes what the incumbent worker does on the job. In a competency-based training program these two statements obviously must be very close in content. To be sure this idea is clear to you, take a look at the following example.

This is one task a cosmetologist does on the job:

Slither hair

This is how a cosmetology trainee is expected to demonstrate that skill in the school program:

Give necessary equipment and supplies and provided with a patron whose hair needs tapering on the ends, slither patron's hair. The procedure will remove excess bulk from ends of hair and satisfy patron.

The performance objective you will write for each learning guide should follow this same structure. That is, it should be composed of three elements:

1. The conditions or circumstances under which the learner will be performing the competency,
2. What the learner is expected to do,
3. The level of acceptable performance that the learner must reach before the competency is achieved.

Write the performance objective directly to the learner, not to other teachers. You might find it helpful to think of the three elements of the objective in this way:

1. Given:
2. You will:
3. How well:

Fortunately, for the purposes of developing learning guides the performance objective is simple and straightforward. The performance test at the end of the guide will describe in detail the circumstances of the performance (the "given"). The competency statement itself describes the task (the "you will"). The checklist that is part of most all performance tests describes the level of acceptable performance (the "how well" element of the objective). Most of the performance objectives you write will therefore look like the examples in sample 1.

As you write these objectives you are going to have to make some important decisions about the students' final performance. For example, you will have to decide how close to an actual situation you can expect the final performance to be. In the samples, item 3 requires a real marine vessel and an actual dock; the assumption being that there is no other satisfactory way in which a trainee's performance can be assessed. Item 2 requires a "patient," but the patient in this case might be an actual hospital patient or a fellow student taking that role. Sometimes it is unrealistic to expect an actual situation; item 4 specifies a mannequin of an infant because a live unconscious infant isn't likely to be available just when the trainee needs to be assessed on this skill. As a general principle however, the closer you can come to an actual situation the better.

The final performance you specify should be designed to fit the competency. If the occupational competency is "figure compound interest," then a paper-and-pencil test with problems of compound interest could be appropriate. On the other hand, many competencies involve applying knowledge. The student might be asked, for example to develop a schedule for maintaining his/her personal health; then a written plan, assessed by a checklist, would be most appropriate. If a psychomotor skill is involved (e.g., "plaster a wall"), then the final assessment procedure should call for an actual performance using a criterion-referenced checklist to evaluate the trainee's proficiency in plastering a wall. In this case a paper and pencil test simply will not do.

Another decision relates to the tools and equipment provided the trainee. When writing performance objectives for learning guides a simple statement like, "Given the necessary tools and equipment..." or "Given a malfunctioning engine," is usually sufficient. There is no need to spell everything out in detail as in this objective taken from a security guard training program: "Given a flashlight, a two-way radio, a pencil, paper, and post orders, patrol an assigned area." The directions for the performance test will take care of all that.

One decision you don't have to make at this time relates to the acceptable level of performance. In most cases you will be producing a checklist later, and the ten or fifteen items on this checklist will describe in detail the criteria that the trainee's performance or product will have to meet.

The performance objective will usually be written early in your development of the learning guide. In this way it sets the direction for the whole guide. However, if in the course of developing the rest of the guide you decide that the objective needs some improvement, don't hesitate to change it later, before the guide is completed.

SAMPLE 1

PERFORMANCE OBJECTIVES

1. Competency statement:
   Install water storage tanks

   Performance objective:
   Given a hot water storage tank and the necessary tools and equipment, install the tank in a hot water supply system. The finished job must meet all criteria on the checklist.

2. Competency statement:
   Transport patients in wheelchairs

   Performance objective:
   Provided a patient and a wheelchair, transport the patient, according to the checklist criteria.

3. Competency statement:
   Maneuver vessel to dock

   Performance objective:
   Given access to a vessel, maneuver the vessel to a dock. The docking must conform to all items on the checklist.

4. Competency statement:
   Give artificial ventilation to an unconscious infant

   Performance objective:
   Provided a mannequin of an infant, perform mouth-to-mouth and nose ventilation. The procedure must meet the criteria on the performance checklist.

5. Competency statement:
   Prepare bill of sale

   Performance objective:
   Given the necessary data on a sales transaction, prepare a bill of sale without procedural or mathematical errors.

ENABLING OBJECTIVES

A good learning guide is not just composed of a collection of learning activities that the writer hopes will help the student learn the competency. A good learning guide has a definite and well thought out sequence of learning experiences designed to lead the student through the learning process until he/she achieves the competency and can perform at the accepted level of skill. That's where enabling objectives come in--they provide the structure that organizes the target competency or objective into smaller or intermediate objectives.

A learning guide is similar in many ways to a carefully constructed lesson plan, except the guide is written for the student, while the lesson plan is used by the teacher. Like a good lesson plan for an occupational skill, the guide will usually have a teaching/learning sequence similar to the following:

1. Introduction (Why learn it)
2. Essential information (Explanation of the procedure)
3. Demonstration (How to do it)
4. Guided practice
5. Skill development practice
6. Evaluation

Most learning guides you write will have enabling objectives for the: (1) essential information, (2) demonstration, and (3) practice sections of this plan. For some basic skills there may be only one enabling objective. Others may require as many as four.

Enabling objectives are designed to enable, or help, the student to learn the occupational skill. They grow out of the knowledge elements and subtasks of the skill. They break the learning (and the learning guide) up into two to four major parts, making it easier and more efficient to master each part. Don't confuse enabling objectives with the procedural steps required to perform a competency. Examples in sample 2 show the relationship of some enabling objectives to the competencies they are designed to teach.

SAMPLE 2

TYPES OF ENABLING OBJECTIVES

Knowledge enablers

- *Define important terms related to respiratory disease.*
- *Name the major parts of a machine lathe.*
- *Describe the operation of a fuel pump.*
- *Discuss in writing the concept of supply and demand.*
- *Identify common furniture woods and their special characteristics.*

Skills enablers

- *Read an oral thermometer.*
- *Operate a 16mm projector.*
- *Count money.*
- *Type and correct spirit masters.*
- *Set up router and template for installing door hinges.*

Attitude enablers

- *Cooperate with fellow employees.*
- *Maintain confidentiality of professional information.*
- *Treat all patrons with courtesy, regardless of socio-economic status.*

Guidelines for Developing Enabling Objectives

a. Each objective should cover a major component of the target competency.

b. Most competencies will have a knowledge component; i.e., information, concepts, and procedures related to the competency. The knowledge component is presented first.

c. Almost all occupational competencies should have a practice component; i.e., simulated performance, guided practice, and/or individual practice.

d. Some hazardous competencies may have a safety component, and thus an enabling objective just concerned with the safety aspects of the task.

e. An enabling objective devoted to developing desired attitudes may be appropriate for some competencies.

f. Learning to operate a specialized or complex piece of equipment may call for an enabling objective itself.

g. It is not always necessary to include the "conditions" element of the objective. There are times, however, when you will want to specify the resources given to the learner, or the limitations imposed. For example:

- "After completing the required reading..."
- "Without the aid of references..."
- "In the clinical setting..."
- "In a simulated situation..."
- "Given a set of data..."

h. The main section of the enabling objective should begin with an action verb and is short and concise.

i. It is not necessary to include a criteria of performance (the "how well" component) in an enabling objective.

Remember, the enablers are designed to help students achieve the competency. They are not ends in themselves. If a student can perform the task perfectly without completing one or more of the enablers that is perfectly all right. If any enabler doesn't really help students learn the task, it should be changed or deleted.

The performance objective and enabler worksheet that follows is designed to help you analyze a performance objective in order to determine what enabling objectives will be helpful to students. To use it, first write out the performance objective in the space provided, dividing it into its components of conditions, performance, and standard/criterion. Then, from your knowledge and experience of this competency and of the

occupation, ask yourself these questions, and write down your ideas in the space provided:

1. What must students know in order to meet this objective?--Is there some new terminology that they must know? Is there essential background information? Are there unfamiliar concepts that must be explained? Are there procedures or safety factors that must be understood?

2. What must students be able to do in order to meet this objective?--Do they need to be able to operate a specialized piece of equipment? Must they be able to behave or perform in a certain way? Are there any difficult skills or tricks of the trade that they must learn? Is speed of performance going to have to be developed?

3. What special attitudes must students exhibit if they are going to achieve this objective?--In order to do the task well are they going to have to overcome some fear or feeling of repugnance? Are there special attitudes about dealing with customers or patients that come into play here? Is there a new outlook on their relationship with fellow employees that must be learned?

You don't need to fill in the spaces if there is nothing of consequence that should be there. Sometimes there will be no new knowledge that must be learned. There will be many competencies in most occupations in which no special attitudes are involved.

As you analyze the overall performance objective into the knowing, doing, and attitude components it should become evident to you what learning experiences students need. If there is a significant knowledge component you may want to write a performance enabler (or even two) like this:

> *After completing the required reading, define important terms related to the skin and skin care.*

If you see that there is a new skill or unfamiliar piece of equipment that must be learned, your enabler might look like this:

> *After viewing a demonstration (either by the instructor or on videotape) set up the ellipseograph.*

There may be an attitude that students must develop in order to perform the competency well. If you decide that this is the place to teach it, include it as an enabling objective.

> *Exhibit enthusiasm for, and confidence in, the merchandise as you talk to customers.*

Later, you will select specific learning experiences to help students achieve each enabler.

WORD LISTS FOR PERFORMANCE OBJECTIVES AND PERFORMANCE ENABLERS

As you write performance objectives and enablers for your learning guides you will probably find yourself searching for words that describe exactly what you want students to be able to do. The critical element in competency statements and objectives is the first word--the action verb--and it is this word that is needed to accurately reflect job requirements.

Three lists of key words are given in the section that follows.

- List 1 gives some of the more common action verbs that appear in competency statements for many occupations. You can scan this list for ideas as you write and refine occupational competency statements and objectives.

- List 2 organizes key words by various performance classifications. Thus, if you are searching for a word related to building or producing something, scan the list of words under PRODUCTION to see if any of them fit your situation.

- List 3 should help you in the writing of performance enablers. These verbs are related to learning tasks rather than occupational competencies. If, for example, you want students to show that they understand or comprehend some technical information, you can review the list of key words under the heading, COMPREHENSION LEVEL.

These lists of terms are intended to serve as aids and guides in developing your CBVE curriculum. They are not meant to be the sole source for identifying student performances and behaviors. You may, in fact, wish to add words that you find particularly useful in your occupational area.

1. Some Typical Performances for Occupational Competencies

Adjust
Administer
Advise
Align
Alter
Analyze
Answer
Apply
Arrange
Assemble
Assess
Assist
Attach
Bake
Balance
Bend
Boil
Bore
Braze
Broil
Build
Buy
Calibrate
Carve
Cash
Cast
Change
Chart
Check
Clean
Clear
Climb
Collect
Comb
Communicate
Compensate
Complete
Compute
Conduct
Connect
Construct
Convert
Correct
Cook
Curl
Cut
Decorate
Demonstrate
Deliver
Design
Determine
Develop
Diagnose
Dig
Direct
Dissassemble
Disinfect
Dismantle
Dispense
Drape
Draw
Dress
Drill
Drive
Duplicate
Edit
Ensure
Establish
Evaluate
Examine
Execute
Exhibit
Fabricate
Fasten
Figure
File
Fill
Fill out
Finalize
Find
Fit
Fix
Flush
Follow
Follow up
Free
Freeze
Fry
Get
Give
Glaze
Grate
Greet
Grill
Grind
Handcuff
Haul
Help
Hem
Hoist
Hone
Identify
Insert
Inspect
Install
Instruct
Involve
Issue
Jack
Join
Judge
Knit
Knurl
Label
Ladle
Lay
Lay out
Lead
Level
Load
Locate
Lock
Loosen
Lubricate
Maintain
Make
Make up
Mark
Mask
Measure
Measure off
Measure out
Meet
Mill
Mix
Moderate
Modify
Mount
Move
Mow
Negotiate
Observe
Obtain
Open
Operate
Order
Organize
Orient
Originate
Overhaul
Package
Paint
Patch
Perform
Pick
Pick out
Pick up
Pin
Place
Plan
Plant
Plot
Plow
Position
Post
Pour
Practice
Prepare
Present
Press
Price
Print
Process
Produce
Provide
Purchase
Quench
Raise
Rebuild
Receive
Recognize
Recommend
Recondition
Record
Refinish
Re-do
Remove
Repair
Replace
Report
Reproduce
Retrieve
Rewire
Rework
Rinse
Roast
Roll
Rotate
Rough in
Run
Saw
Scrape
Seat
Secure
Select
Sell
Serve
Service
Set
Set up
Sew
Sharpen
Shape
Show
Shut down
Slice
Solder
Sort
Splice
Stand
Start
Sterilize
Stitch
Store
Straighten
Submit
Suggest
Supervise
Synchronize
Tack
Take
Tap
Test
Thaw
Thin
Transcribe
Transfer
Transport
Treat
Trim
Troubleshoot
Turn
Turn off
Turn on
Type
Unlock
Use
Ventilate
Verify
Visit
Wash
Wax
Weigh
Weld
Wire
Work
Write
Wrap

2. Some Typical Performances Organized by Occupational Classifications

APPLICATION

Apply
Care for
Carry out
Dispatch
Dispense
Effect
Employ
Give
Implement
Issue
Obtain
Process
Specify
Undertake
Use
Utilize

COLLECTION OF INFORMATION/THINGS

Collect
Detect
Gather
Locate
Obtain
Order
Procure
Requisition
Secure
Select

COMMUNICATION

Advise
Communicate
Convey
Disseminate
Inform
Interpret
Present
Read
React to
Recommend
Report
Submit

CREATIVITY

Change
Conceive
Conceptualize
Create
Design
Develop
Devise
Formulate
Initiate
Modify
Originate
Revise

EVALUATION

Adapt
Appraise
Assess
Check
Evaluate
Inspect
Judge
Measure
Test

MAINTENANCE

Adjust
Align
Assemble
Install
Maintain
Manipulate
Operate
Repair
Service
Set up

MANAGEMENT

Administer
Arrange
Conduct
Contract
Control
Coordinate
Direct
Manage
Negotiate
Officiate
Organize
Oversee
Preside
Regulate
Resolve
Schedule
Supervise

PERFORMANCE

Demonstrate
Display
Exhibit
Perform
Practice
Show

PROBLEM SOLVING

Analyze
Calculate
Determine
Diagnosis
Estimate
Examine
Plan
Propose
Research
Solve

PRODUCTION

Build
Complete
Construct
Duplicate
Execute
Fabricate
Form
Lay out
Make
Manufacture
Mount
Produce
Reproduce
Work

RELATIONSHIPS

Assist
Cooperate
Follow
Help
Instruct
Lead
Participate
Teach

VERIFICATION AND SUPPORT

Establish
Justify
Prove
Record
Support
Verify

WRITING

Author
Compile
Compose
Correct
Draft
Draw
Edit
Illustrate
Prepare
Record
Review
Write

3. Some Key Words for Writing Performance Enablers

KNOWLEDGE LEVEL	APPLICATION LEVEL	SYNTHESIS LEVEL
Define	Interpret	Compose
Repeat	Apply	Plan
Record	Employ	Propose
List	Use	Design
Recall	Demonstrate	Formulate
Name	Dramatize	Arrange
Relate	Practice	Assemble
Underline	Illustrate	Collect
	Operate	Construct
	Schedule	Create
	Shop	Set Up
	Sketch	Organize
		Manage
		Prepare

COMPREHENSION LEVEL	ANALYSIS LEVEL	EVALUATION LEVEL
Translate	Distinguish	Judge
Restate	Analyze	Appraise
Discuss	Differentiate	Evaluate
Describe	Appraise	Rate
Recognize	Calculate	Compare
Explain	Experiment	Revise
Express	Test	Score
Identify	Compare	Assess
Locate	Contrast	Estimate
Report	Criticize	
Review	Diagram	
Tell	Inspect	
	Debate	
	Inventory	
	Question	
	Relate	
	Solve	
	Examine	
	Categorize	

COMPONENTS OF A LEARNING GUIDE

A standard format has been developed for writing student learning guides. This format is designed to be suitable for all occupational areas and for all competencies. It is easy for students to use and it functions well. By following the format carefully, you will find that you are free of routine decisions and you can concentrate on the content of the learning guide itself.

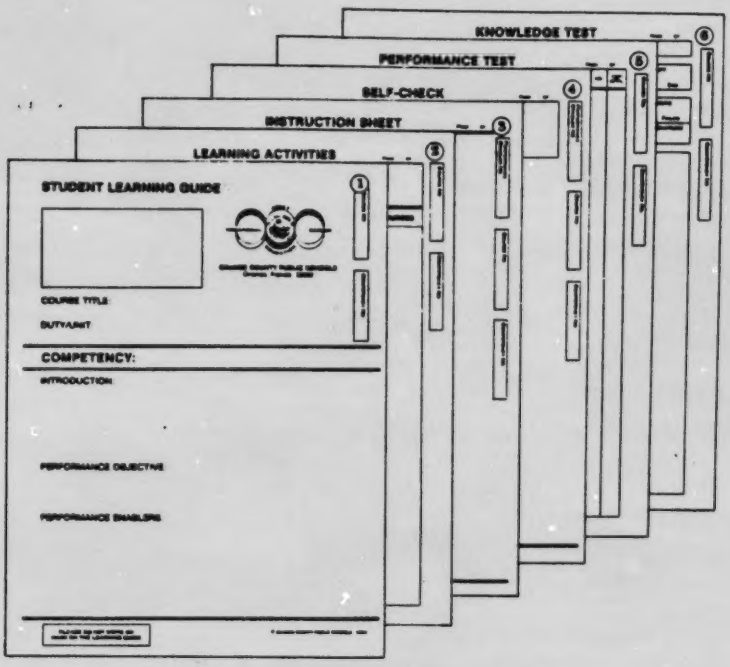
Learning guides include the following major components, in this order:

1. Cover page
2. Learning activities
3. Instruction sheets
4. Self checks
5. Performance test
6. Knowledge test

The specific contents of each component are listed in the description sheet that follows. While the format will be the same for all learning guides, the way in which the components are used may vary. For example, some of the guides you develop may require several instruction sheets in order to present the necessary information to the student. Other guides may need a single instruction sheet, or perhaps none at all. You may decide that for the particular competency you're working on a knowledge test is inappropriate.

In the section that follows, each learning guide component will be described in more detail, and you will be given guidelines for developing the component. If you follow the directions your task will be easier and the guides you produce will be of high quality and will work efficiently to help students achieve the competency.

STUDENT LEARNING GUIDE
CONTENTS



(1) COVER PAGE

- Contains Student Learning Guide number.
- Identifies the school.
- Identifies the district course title.
- Identifies the duty/unit of instruction.
- Identifies the occupational competency covered.
- Contains the introduction.
- Presents the performance objective and enablers.

(2) LEARNING ACTIVITIES

- Contains the performance enabler.
- Lists learning experiences.
- Lists special instructions and resources.

(3) INSTRUCTION SHEET (optional)

- Provides a means for instructors to present supplemental information.
- Can contain facts, concepts, diagrams, drawings, illustrations, etc.

(4) SELF CHECK (optional)

- Provides students with frequent and immediate feedback on their progress.
- Includes self check answer key.

(5) PERFORMANCE TEST

- Evaluates student's ability to perform the competency or skill.
- Contains the performance standards.
- Contains an evaluation scale.

(6) KNOWLEDGE TEST

- Evaluates student's knowledge of key information.
- Contains the content of a written test.
- Controlled by the instructor, not bound with the learning guide.

THE TITLE PAGE

The title page of every learning guide contains some basic identification and information to the student working through the guide. As a learning guide writer it will be your responsibility to insert the required information and check to see that it is correct.

Course title--Enter here the official course title for the course you are working on, just as it appears in the records of the school district.

Duty/unit--Enter the duty statement for the duty area on which you are working. Copy the statement just as it appears on the validated competency list for the program.

Competency--Write the competency statement in full, just as it appears on the validated competency list. Make no changes.

Course No. and Competency No.--Enter these numbers as they appear on the validated competency list.

Performance Objective--Write the performance objective for this learning guide just as it was developed earlier. Make a final check to be sure: (1) the form is correct, and (2) the words say just what you want them to say.

Performance Enablers--Write the performance enablers for the particular performance objective just as they were developed earlier. There may be just one enabler, or there may be several, depending on the complexity of the skill involved. Make a final check to be sure the enablers are correctly worded.

A sample of a complete title page follows.

SAMPLE 3

STUDENT LEARNING GUIDE

SAND HILLS TECHNICAL INSTITUTE

WEST RUFF ROAD

LITTLEBURG, FLORIDA

ADULT VOCATIONAL CAREER EDUCATION

ORANGE COUNTY PUBLIC SCHOOLS
Orlando, Florida 32802

COURSE NO. 402600

COMPETENCY NO. 800.015

COURSE TITLE: PARTS MARKETING

DUTY/UNIT: DEVELOPING MARKETING SKILLS

COMPETENCY: APPLY BASIC ECONOMICS CONCEPTS

INTRODUCTION:

Economics plays a very important part in all our daily lives. Therefore, every citizen should understand the economic principles upon which America's business and government is built. It is even more important that you, as a marketing employee, understand how our economic system works because your job responsibiities will involve a number of economic considerations. The activities in this learning guide will provide you with the knowledge that will help you achieve some of the occupational competencies related to economics that you need in order to perform your job successfully.

PERFORMANCE OBJECTIVE:

In a test situation, and without the aid of reference materials, apply key economic concepts to marketing problems with at least 80% accuracy.

PERFORMANCE ENABLERS:

1. After completing the required reading, demonstrate knowledge of basic economic principles.

2. Given descriptions of five marketing situations, identify the economic principles that are operating in each situation.

PLEASE DO NOT WRITE OR MARK ON THE LEARNING GUIDE

© ORANGE COUNTY PUBLIC SCHOOLS 1982

FOREWORD

This learning guide is one of a large series developed by the instructors and staff of the Orange County Public Schools. It is part of an extensive effort by the school system to implement the competency-based approach in all of its vocational programs.

The vocational program competencies were identified by a committee of instructors and validated by a specially selected group of workers in the occupational area.

ORANGE COUNTY PUBLIC SCHOOLS
Department of Vocational, Adult, and Career Education
434 North Tampa Avenue
Orlando, Florida 32802

THE INTRODUCTION

The introduction section gives the student a brief overview of the learning guide. It tells the purpose of the guide, how it relates to what the student has already learned, and its relation to future learning. In a few words the introduction says what the student is going to learn in this guide, and why it is important for the student to learn it.

The tone of the introduction should help reassure the student that the competency can be achieved and that the learning activities to follow are going to be interesting. One way of doing this is to describe the useful occupational skill the student will gain from the learning guide.

Guidelines for Writing the Introduction

a. Include a one- or two-sentence statement of the skill the learning guide is designed to help the student achieve (e.g., "...skill in filling out a job application form that will highlight your personal qualities and qualifications, increasing your chance of landing the job").

b. Explain why the competency is important to workers in the occupation (e.g., "Making correct change is done scores of times each working day, and it must be done absolutely accurately each time or you will lose customers"). Avoid general statements like, "To be a good secretary you will need to master this skill."

c. If an unusual occupational term appears in the competency statement (e.g., "administer gavage feeding," define the term very briefly so the student will have an idea what the learning guide is about. However, do not use the introduction as a glossary.

d. Keep the introduction very short. It must be no longer than 75 to 100 words.

e. Write to the student directly, using the second person form (e.g., "As an alterationist, you will be putting cuffs on trousers..."). This will make it more personal, and tend to arouse the student's interest.

f. Try to keep the tone of the introduction friendly and light when appropriate (e.g., "If you learn how to serve well, you will never have that most embarrassing experience of pouring soup down the customer's neck"). Avoid silliness however, and always treat serious subjects (e.g., "perform postmortem care") with dignity and seriousness.

LEARNING EXPERIENCES

The student learning experiences you select for your learning guides are of absolutely critical importance. Depending on the quality and appropriateness of that series of learning experiences the student learns the competency, or doesn't learn__the experiences maintain interest, or create boredom__they increase efficiency, or bog down student progress.

A learning experience in a guide can be thought of as an assignment; an activity that you believe will help students learn a particular phase of the competency in question. It may take a hundred forms; readings, viewing media, projects, practice exercises, interviews, self-checks, and a host of other things that creative instructors can devise. The learning experience page in the guide does no teaching itself, it simply directs the student learner, telling him/her what to do, how to do it, and when. Even though brief and to the point, each learning experience statement gives the student all necessary directions for completing the work without having to go to the instructor for further details.

Good learning experiences must be carefully thought out and sequenced. They must be right on target, providing students with just the information and practice they need, not haphazardly selected with the vague hope that learning will occur. At the same time, the experiences must give complete coverage, so there are no gaps in the students' learning. The level of difficulty and mode of expression should be within the students' abilities and varied enough to maintain interest and motivation. In any series of learning experiences for a particular enabling objective, the experiences should be of sufficient variety suitable for a wide range of student capabilities and learning styles. All this amounts to a tall order for the guide writer, but experience has proved that it can be done.

Sequencing the learning experiences will not be difficult for you. Put them in order as you would a series of assignments or projects for any unit of instruction. For a particular enabling objective, start by giving basic and background information, followed, if needed, by more complex and detailed information and examples. Proceed by giving the student a chance to practice what he/she has learned, then complete the series with some form of skill demonstration or self-check so the student knows that learning has taken place. Remember that the learning experiences are for student use, not for the instructor. An individual student may select from among the experiences those that seem to be best suited or most interesting; that is perfectly all right as long as the important learning takes place. A few students, because of their previous experience may elect to skip an enabling objective altogether; again this is permissible if the competency is mastered.

Guidelines for Writing Learning Experiences

a. Write directly to the student who is completing the learning guide. Use language that he/she is likely to understand.

b. Tell the student exactly what he/she needs to do for each learning experience. Make it simple and clear so the student doesn't have to go to the resource person for further directions.

c. For the most part, begin each experience statement with an action word. Ask the student to read, view, practice, etc.

d. If you direct the student to a reading, give just enough information so the student can find and identify it. You don't need to include a complete bibliographic reference with publisher, date, place, etc.

e. When you refer to a reading in a book, give the author, title, and pages to be read, Underline the title. (e.g., Read Fierer, Modern Cabinetmaking, pp. 104-117.)

f. When you refer to an instruction sheet that is right within the learning guide itself, give its number and title. Place the title in quotation marks. (e.g., Read Instruction Sheet 3, "How to Determine Paper Grain.")

g. If you direct the student to a piece of media, tell the student what kind of media it is (slide/tape, videotape, etc.), the title, and the code number or catalog number, if there is one. Place the title in quotation marks. (e.g., View the videotape, M-6, "Laying Up a Running Bond.")

h. Use the term "resource person" throughout, instead of "teacher" or "instructor."

i. If you want the student to go to the resource person for special materials or special instruction, say so. (e.g., Ask your resource person for recommendations for stores to visit in your community.)

j. Keep the learning steps small, and keep experiences separate. For example, if you want the student to read a selection and then memorize the definitions of ten terms in the reading, write that in two learning experiences.

k. Include as a learning experience any knowledge tests or other evaluation activities that the student is expected to complete. (e.g., Arrange with your resource person for you to take Knowledge Test 1.)

SAMPLE 4

EXAMPLES OF LEARNING EXPERIENCE STATEMENTS

LEARNING EXPERIENCES	SPECIAL INSTRUCTIONS/RESOURCES
Read the text, French and Svenson, Mechanical Drawing, pp. 78-81.	
Read the article by Robert Smiley, "The Importance of First Impressions."	
View the slide/tape, W-17, "Setting up an Oxy-Acetylene Welding Outfit" in the resource center.	
View the videotape, AM-9, "Spray-Painting Vertical Surfaces" in the resource center.	
Solve the practice problems given in Instruction Sheet 3, "Figuring Compound Interest." Arrange for your resource person to check your work.	
Arrange with one or two of your fellow students to visit a local day-care center. Ask your resource person for recommendations for places to visit.	
Check your knowledge of blood types by taking Self-Check 1, "Human Blood Types."	

LEARNING EXPERIENCES	SPECIAL INSTRUCTIONS/RESOURCES
Practice processing batches of checks. Get the practice materials from the resource center and use a calculator to prove your totals.	
Interview a secretary of one of the administrators of the school on the human relations and personal skills that are needed in his/her position. Be prepared to give a short oral report on what you learned to other members of the class.	
Listen to 30 minute audiotape #153, "On Death and Dying." Take notes of this lecture presentation. Arrange with your resource person to discuss the subject of caring for the terminally ill patient with a small group of your peers who have also listened to the tape.	
Plan a complete luncheon menu for one of the six groups described in Instruction Sheet 4, "Practice in Menu Planning." Your resource person will evaluate your menu, using the checklist given in Instruction Sheet 4.	

Types of Student Learning Experiences

The following listing briefly describes a number of kinds of learning experiences that are suitable for use in individualized learning guides in competency-based vocational programs. Some specific examples are also given. These suggestions are not meant to be all-inclusive, but are presented to stimulate the learning guide writers' own creative thinking.

1. Readings from textbooks of short, relevant sections dealing specifically with the knowledge required to reach the objective. This may be a single reference or may be stated as alternative references from different books.

2. Examination or data-gathering from standard reference books of the vocational field (e.g., Machinery's Handbook, Graphic Standards, Reference Manual for Office Personnel).

3. Completion of a section of a programmed text or other programmed material.

4. Reading special materials available in the school library (e.g., books, encyclopedia articles, periodical articles from bound volumes). It is important that the reading is at a suitable level of difficulty for your students.

5. Solving practice problems in the skills component (e.g., computational problems, exercises, data processing).

6. Viewing or listening to individualized audio or audio-visual materials (e.g., slide-tapes, audiotapes, videotapes, film strips, picture books, illustrations). The media materials selected must be readily available to students, and the equipment easily set up and used.

7. Observing or operating models, mock-ups or dummy set-ups to gain understandings of mechanisms or operating controls (e.g., cutaway rotary engine, set-up of electrical circuit, practice keyboard).

8. Role-playing of performance in a simulated situation. Students may take the principal role of the practitioner or the participating role of the customer, the assistant, or the audience.

9. Real-life performances, in which the student functions for short periods of time under controlled conditions in an actual work situation, or in a situation very close to real (e.g., conducting a story-reading time at a child-care center, setting up equipment in a surveying team).

10. Observing a skilled vocational worker in a real work situation. This should be done with specific goals in mind, usually with some form of guide, observation instrument, or report form to give structure and point to the observation period.

11. Videotaping of student performance, to be viewed and used by the student to evaluate and improve his/her own performance.

12. Simulation experiences, in which a student goes through a close appproximation of a real-life performance with the conditions controlled and consequences minimized. "Case Studies" in which students write their reactions and responses to the given situation are also considered simulation experiences. Other examples are: working with a dummy patient in health care, using a model head in cosmetology, disassembling and assembling a non-functional aircraft engine).

13. Small-group experiences, when students at closely related points of achievement can get together to discuss, plan, or evaluate their work (e.g., discuss results of observation, plan for role-playing sessions, discuss professional responsibilities).

14. Instructor demonstration of a procedure. There may be instructional situations in which the best solution is for the instructor to personally perform the operation and describe it as students observe. Usually this will need to be on an individual basis, but sometimes may be possible for small groups or even the total group.

15. Guest speakers or outside experts. These classroom experiences may be listed in an appropriate learning guide and may be scheduled by the instructor at a time when many students are ready for the experience. Usually the nature of the topic is such that the whole group can benefit, even though they may not be at the same point in their learning.

16. Production or construction of projects or services. These must directly contribute to the objective and therefore must be carefully designed and assigned, be of limited scope, and require a limited amount of time (e.g., do a complete manicure on a fellow student, construct a W truss, prepare working drawings of a floating footing, make a skirt with zipper, decorate a cake with icing).

17. Problem-solving activities. Some objectives may require solving the problem involved in given situations. These may be relatively short experiences (e.g., prepare a luncheon menu for a particular group) or quite long-term jobs (e.g., design a vacation cottage for a family of four in a mountain setting). It is very important in problem-solving activities that the student is known to possess the requisite skills, that he/she has access to the information necessary to solve the problem, and that the problem not go beyond the performance objective.

18. Skills practice exercises or drill. Some skills may require that the student not only be able to perform them correctly once, but require that the student be able to do them smoothly, speedily, and flawlessly every time. Learning activities may therefore specify practice periods in terms of time, number of repeated experiences, or quantity of production (e.g., make welds without a rod for two hours, produce ten perfect button holes, take dictation in shorthand).

19. Memorization. The occupational competency may require or suggest that the student can function best if he/she has committed some information to memory. This is a legitimate learning activity in many areas (e.g., memorize the table of metric measures, memorize the Gregg characters, memorize the formula for lathe speeds, memorize a list of medical terms).

20. Collecting activities. Some competencies may be learned by having students gather and collect real objects so as to become familiar with their characteristics, the variety available, the settings in which they may be found (e.g., make a collection of metal fasteners, of building materials, of local lawn weeds, of children's street games, of newspaper display ads).

21. Scaled-down performance. If the real performance is large in physical size, is complex because of the number of participants, or consumes a quantity of expensive materials, a limited performance or a scaled-down situation may give the student a better chance of gaining confidence or success and may be more instructionally efficient and practical (e.g., teach an outdoor game to two children, construct a scale model of a built-up roof construction, lay out an irrigation system on a land contour model, build a corner of a block wall).

22. Reading information sheets specially prepared for the learning guide. These will be concise statements of very relevant information that are geared to the student's level, contain up-to-date information, and are available from no other convenient source.

23. Performing experiments in the laboratory. Assign the student specific experiments to perform with specified equipment and processes, observe the results, and report or use the results in some form.

24. Writing technical reports, reactions to case studies, reports for class discussion, etc. This activity may be particularly valuable in the technical areas, but also may be useful in any occupational program in which writing skills are important.

25. Preparing visual materials. Gather information and produce such graphic materials as diagrams, schematic drawings, charts, graphs, maps, graphic solutions, structural drawings, styling illustrations, layouts, and design sketches. Activities of this type are usually interesting to students, add variety to the learning experience, and tend to reinforce learning.

26. Planning activities. An occupational competency may require that the student learn how to plan the job or operation. Planning may include selecting or designing the job, developing a sequence of procedures, figuring materials and costs, noting checkpoints and safety cautions, and devising evaluation standards.

27. Critique or evaluation experiences. In these, the student is asked to rate or evaluate an example of a finished product or service, or make a critical analysis of a performance of a specified skill. The object of the evaluation may be a sample product, the work of a fellow student, the student's own work, or a videotape of a performance. The final result may be a rating sheet, written report, or oral report.

28. Cooperative student experiences. Even when instruction is individualized, there are situations in which two or more students may profitably work together in a learning experience. Many occupational tasks involve teamwork and it is proper for the learning activities to incorporate this. Activities that involve heavy lifting, cooperative production techniques, worker interaction, or teamwork are appropriate small-group learning experiences.

Suggestions for Using Learning Experiences in CBVE Programs

- Readings must be directly related to the instructional objective--the learning guide writer should not require the student to read an entire chapter just because it would be "nice to know," when a page or two is all that is really necessary to deliver the information.

- Don't be afraid to use some group activities. In CBE small groups of students working on related competencies tend to form themselves, and total class groups can be called together by the instructor for special purposes. You might specify that the learner perform before a group of peers (as in giving a presentation), or form a small group for a role-play activity, or participate in a field trip. Group activities, properly used and interspersed in the program, will add variety and interest to student learning experiences. Obviously, group activities should be selected with care, and used only where they are the preferred mode of instruction.

- The instructor must not be overused in the routine learning activities, but must be released for his/her functions of assisting, helping students overcome learning difficulties, and evaluation. Do not use instructor in routine role-playing, for additional assignments or information, or in practice exercises.

- Observation experiences should be directly pointed toward achieving the competency and not undertaken simply in the vague hope that somehow the experience will be helpful. Observation time must be reasonably short. Arranging for observation must not be embarrassing or difficult for the student, or time consuming for the instructor.

- In individualized instruction, skills demonstrations by the instructor will need to be strictly limited. It is unrealistic and inefficient to expect that the instructor will be able to present elaborate demonstrations to each student individually as needed. Group demonstrations are not likely to take place at a time when all students will be ready to learn from them, except perhaps in the early phases of a program. "Mini-demonstrations," taking just a minute or two to complete, may be a practical device. Videotapes of the instructor giving demonstration are easy to make and are very suitable for individualized instruction.

- Every vocational instructor should be concerned with the improvement of student communication skills, but in most vocational areas the success in the program should not depend on the student's ability to read at a high level, or write skillfully. Most learning activities, therefore, should not require high level communication skills, and the evaluations should not be based on the student's ability to write effectively. Of course, if the program competencies specify a certain verbal ability, the learning activities must reflect this.

Use of Media in Learning Guides

One of the basic principles of CBVE is that students should be given a variety of means by which to learn. In the learning guides you write you should try to use as many modes of instruction as possible. This certainly includes the use of various kinds of audio-visual materials or media. However, for individualized competency-based instruction some forms of media are more suitable than others. The following section gives some guidelines for specifying media in your learning guides.

- Supplement readings with cassette audiotapes whenever possible. It is easy for the instructor (or some good oral reader) to make tapes of the readings so students who are poor readers can both see and hear the information.

- Use simple drawings, diagrams, charts, and other graphics in the instruction sheets. These must be easy to produce and reproduce.

- Slide/tape presentations are excellent for CBVE. Students find them easy to use, and they can go over any difficult sections as often as they like until they learn. If you select commercially made slide/tapes for inclusion in your guide, view them personally to make sure they are right on target.

- You may be able to make picture books from slide/tapes. Color pictures are printed from the slides, and the tape commentary is typed on the mounting page below the picture as a caption, then the pages are bound with plastic binders. All students like the books because they can take them right to their work stations; for hearing impaired students they are a must.

- If overhead transparencies are already available you can still use them in learning guides because the equipment to view transparencies is simple for students to operate. Better still, have the transparencies reproduced on paper as instruction sheets.

- Video cassettes, especially in color, are excellent for CBE. Where you want to show students a performance or a skill that incorporates color and/or movement videotapes are almost indispensable. To avoid having the instructor repeat demonstrations constantly, he/she can simply give the demonstration in front of a video camera and make a tape. The standard cassette is the form to specify because students can use it easily, without damage.

- 16mm films just don't work very well in CBE. They are best for group-based instruction. Do not use them in your learning guides.

SPECIAL INSTRUCTIONS/RESOURCES

On the learning activities sheet there is a column headed "Special Instructions/Resources." This column is meant for any comments you would like to make to the student about a particular learning activity that appears in the learning experiences column next to it. It is designed to make the student's work more effective and efficient. If you have no special instructions for a particular learning activity, leave the space blank. Here are some ways to use the special instructions column:

- Tell the student where to find the assigned reading or media package if it is in some way unusual. You can assume that all regular materials will be housed in the program's resource center.
- Explain the purpose of the learning experience if there may be doubt or confusion about it.
- Note any key points or information you wish the student to get from the learning experience.
- Suggest some questions the student might ask if the experience is an interview with someone.
- Give a word of caution if there are safety hazards involved.
- Note any problems that are likely to come up in the course of the experience, and perhaps what to do about them.
- Suggest possible alternatives if the assigned resource may not be available.

Sample 5 shows some examples of the kind of special instructions that you (and the student) may find helpful. Keep the instructions short, businesslike, and to the point. Make them as clear and simple as possible so the student won't have to go back to the instructor to find out what you mean.

SAMPLE 5

LEARNING EXPERIENCES	SPECIAL INSTRUCTIONS/RESOURCES
	You will find this handbook in the reference section of the school's main library. If you can't locate it, ask the librarian.
	The purpose of this experience is to expose you to another point of view. Make up your own mind and be prepared to defend your position.
	Memorize the formula given on p. 54 so you can use it in the lab without having to go back to the text.
	You might want to ask the employer: a. if there are special qualifications needed for this job b. what the job outlook is for the next few years c. what additional training is needed for advancement
	Shut down all electrical power before making any adjustments.
	This slide/tape is now several years old, but the important points are just as correct as ever.
	If this organization does not have a branch in your community, ask your resource person to recommend another for you to visit.

INSTRUCTION SHEETS

For the most part, you will be referring in your learning guides to resource material that is already developed and published. You will direct students to pages of textbooks, reference books, articles, manuals, workbooks, and other printed materials. However, there will be times when the right kind of information or instruction just isn't available to you. In that case, you will want to develop an instruction sheet and include it right in the learning guide.

An instruction sheet puts the information or instruction at the fingertips of the student. A specially prepared instruction sheet may be superior to other forms of written material because it presents the information, the concept, or the direction in just the way the learning guide writer wants the student to receive it. An instruction sheet in a learning guide takes the place of a teacher-made handout often used in traditional instruction.

An instruction sheet may be a single sheet, or it may be several pages in length. Some learning guides may benefit from having several instruction sheets, other guides will need none. Remember, however, that a well prepared instruction sheet can be time consuming to develop, so direct students to existing materials whenever possible. You may want to develop instruction sheets if:

- The information is unusual, and not available from any standard source.
- The information or data is particularly new and up to date.
- The available readings are scattered, or written in too much detail.
- Available readings are written at too high a reading level for the expected students in the program.
- Students need to refer to instructions frequently in order to complete laboratory work.
- Special instructions for projects, learning activities, or laboratory work are needed.
- An observation guide or checklist would help the student complete a learning activity effectively.

All instruction sheets should be carefully thought through and prepared. You should know exactly what you are attempting to accomplish with the instruction sheet. All facts, data, and technical specifications must be accurate. Spelling, grammar, and terminology must be correct. The writing should be at the appropriate level. Drawings, diagrams, sketches, and charts should not look crude or amateurish. If you need help on any of these, get it.

Use of copyrighted materials in instruction sheets. It is very important that you avoid infringement of copyright laws. Check to be sure that anything you expect to use is free of copyright. Just because the material is to be used in schools for instruction doesn't absolve you from copyright laws. It is possible to obtain special permission to use protected materials, but this is difficult and expensive; avoid it.

If you want to use materials that have been developed by someone else, even if they are unprotected, give credit to the author (e.g., "adopted from David Barclay, Automotive Curriculum Guide"). Remember, plagiarism is stealing. The best practice is probably to develop your own materials. Read and examine what others have done, then write your own instruction sheets, making them suitable for your learning guide and your students.

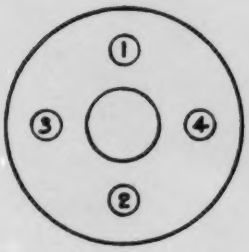
SAMPLE 6

INSTRUCTION SHEET 2

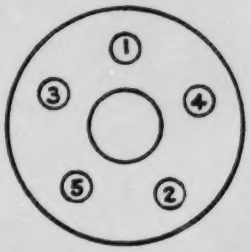
HOW TO INSTALL A TIRE AND WHEEL ASSEMBLY

When you install a tire and wheel assembly, follow these steps:

1. Place the wheel on the hub and align holes in rim with lugs.
2. Start all lug nuts by hand to be sure the threads are properly engaged. Be sure to put lug nuts on with the tapered face toward the wheel.
3. Use the air impact wrench to tighten the nuts snugly. Follow the tightening order shown below.



Four-Lug Wheel



Five-Lug Wheel

4. Lower the vehicle to the ground.
5. Check air pressure, using manufacturer's specifications.
6. Install the wheel cover or hub cap.

Guidelines for Writing Instruction Sheets

a. Use language that is clear and easily understood by the students for whom the sheet is intended.

b. Define new technical terms as they are used for the first time.

c. Add simple sketches and diagrams for greater clarity and to maintain interest.

d. Give the student clear directions about what he/she is supposed to do. Minimize the need for the student to go to the resource person for additional instructions.

e. Include only information that is needed to help the student achieve the competency. Don't fill up instruction sheets with unnecessary information, no matter how fascinating it may seem.

f. Identify each instruction sheet with a title and a number so students can find it easily (e.g., Instruction Sheet 2, "How to Apply a Venturi Mask").

g. Paper copies of overhead transparencies that you already have can be used as text material or as illustrations. They can be used full sized or reduced.

h. Instruction sheets often contain lists. If the list consists of items without any particular sequence, precede each item with a bullet (as on the list on p. 48) or a letter (as on the list you are now reading). If the items are in a definite order or sequence (as in the steps in a procedure), number each item (1, 2, 3, 4, etc.).

i. Use the instruction sheet format given. Instruction sheets must be 8½ x 11 in size and read from the bottom of the page or the right side of the page.

SELF-CHECKS

One of the basic principles of CBVE is that students should know at all times how well they are progressing toward achievement of the target competency. The section in the learning guide headed, "Self-Check," is designed to do just that. The activities in the self-check provide students with evidence about whether they have sufficiently mastered the knowledge component of the competency to proceed to the next series of learning experiences.

The self-check is for the student's own use. It is not to be checked or corrected by the instructor unless the student chooses to have him/her do so. It is never used as a basis for awarding a grade. In fact, the student decides whether or not he/she wishes to complete the self-check.

Self-checks usually consist of questions or essay items based on the readings or other knowledge-centered learning experiences the student has just completed. In a typical learning guide the self-check is given at the end of the learning experiences under the enabling objective related to background knowledge, and before the learning experiences related to practice of the competency. If the knowledge component is complex and/or difficult, you may wish to include more than one self-check activity in the guide; one for each enabler devoted to knowledge. The self-check itself should consist of items drawn from the readings or media. It should be possible for any student who has done the readings carefully to successfully complete the self-check without real difficulty.

Self-checks are also often valuable for the skills practice section of a learning guide. After students have gone through the learning experiences and have practiced a procedure or task, it is often helpful to them to know how well they have succeeded. This is particularly true if the procedure is a complex or difficult one. A self-check of a skill may be best handled by giving students a practice situation or a simulation situation and providing a simple checklist with which to rate their own performances or finished products. Sometimes it might be appropriate to have them make a videotape of their performance, or ask a peer to evaluate their performance, again using a checklist.

Under the "Learning Experiences" column, you should direct the student to the appropriate self-check with a notation like the following:

> To determine whether you have sufficient technical knowledge about electronic ignition systems, complete Self-Check #1.
>
> or
>
> To check your skill in calibrating a meter, do the activity in Self-Check #2, using the checklist to evaluate your work.

Guidelines for Developing Self-Checks

a. The items should cover all major points and important aspects of the technical knowledge. Check to be sure you have not included insignificant details or trivialities.

b. Do not include items that simply require rote responses (e.g., List the five major causes of malfunction as given in the text). This accomplishes little and bores students.

c. Form your items so they require the student to apply his/her knowledge in a new way to see implications, draw conclusions, or understand the importance of the knowledge.

d. Brief essay-types items make for a good self-check, but you may also use well-constructed objective items; i.e., matching, completion, multiple-choice. Even true-false items can be used if you are concerned with knowledge of facts, but they should be used sparingly.

e. Employ no trick questions or confusing items. Give the student every chance to learn and to succeed.

f. Try to keep the self-check limited to one page. Two pages should be the maximum.

g. In the box at the top of the "Self-Check" sheet, provide clear and simple directions to the student completing the self-check. If you want the student to compare his/her responses with the answers on the back of the sheet, or if you want him/her to have the instructor check the work, say so in the directions.

h. Provide the student with correct responses on the sheet headed, "Self-Check Answer Sheet." If there are essay-type items, write a model answer so the student can compare his/her response to yours. Your model answer should be more elaborate and detailed than one you would expect the student to write. Remember, this is a chance to reinforce some of the learning that should have taken place.

KNOWLEDGE TESTS

Some learning guides, but certainly not all, may require a test of knowledge as a part of the guide. Unlike a self-check, a knowledge test is basically for the instructor's purposes, not the students'. It is an actual examination, to be checked and graded by the instructor, with the results entered in the student's record. The purpose of the knowledge test is to determine whether the student has acquired the level of background and related knowledge considered essential by the learning guide writer. If the student reaches the stipulated level, he/she goes on to learning the actual skill. If not, he/she recycles to bring the knowledge level up. In some ways knowledge tests may seem to be contradictory to the principles of CBVE. After all, we want to focus on the student's being able to perform the skill, not just knowing about the skill. Still, there are legitimate reasons for developing a knowledge test for some learning guides. You may decide on a knowledge test for an occupational competency if it has one of the following characteristics.

- The competency involves a heavy knowledge component and a light skills component (e.g., skills involving diagnosis or trouble shooting, skills related to adherence to laws or procedures, skills involving complex concepts and principles).

- The competency includes distinct safety hazards or special procedures that the student must know about before being allowed to proceed with practicing the skill.

- The knowledge is included in a paper-and-pencil licensure examination that the student must be prepared for and must be able to pass before being allowed to enter the occupation.

Like any traditional test, the knowledge test associated with a learning guide must be carefully constructed. While any test form (e.g., objective or essay) may be appropriate, you must be sure that the knowledge test can be graded quickly and accurately by the instructor. As you develop the knowledge test supply a test answer key for the instructor. Knowledge tests will not be bound into the students' copy of the learning guide; they will be produced on separate sheets and kept in a secure file by the instructor. The instructor will give the test individually to students as they indicate they are ready for it.

The question of the required level for passing the test is difficult. There is really no defensible magic number to divide passing from failing. Try to construct the test to require 100 percent mastery. If you specify 75 percent as the passing level, you are saying that 25 percent of what the student was asked to learn wasn't needed.

Guidelines for Developing Knowledge Tests

a. Use your best test-development techniques. If you need to brush up on this, reread a standard text on the subject (e.g., John A. Green, Teacher-Made Tests).

b. Cover all major or key information presented in the learning experiences of the guide. Don't just select a few points at random.

c. Be sure you are not testing for information that wasn't presented. Check the readings carefully to determine that the student could actually have learned the required information.

d. Don't limit yourself to the lowest levels of knowledge; recall of facts. Use as many levels of the cognitive domain as possible.

e. Consider including items that test the student's comprehension and understanding (e.g., "Why does this happen?" "Why not...," "What if...," "When would you...," or "How can you tell...").

f. Include enough items to completely assess the necessary information. This may mean as few as five items, or as many as 20 items, rarely more.

g. You may use items that already appear in the self-check if you change them somewhat so they aren't easily recognized.

h. Give the student complete directions for taking the test. Include: (1) the purpose of the test, (2) how to respond to the items, and (3) the minimum score required for passing.

THE PERFORMANCE TEST

The last, and perhaps most important, section of every learning guide is the performance test. The performance test is just that; it gives the student directions for a final test situation in which he/she must perform the target competency according to specified standards. The standards, or criteria, are clearly stated in the checklist that is a part of the test, so both instructor and student know exactly what is expected.

The results of the performance test determines whether the student recycles (i.e., practice or relearns the competency before attempting the test again), or progresses to a new competency. The performance test must be fair to the student, must meet occupational standards and requirements, and must be feasible for the instructor to set up and evaluate.

Up to this point in his/her learning the student has acquired background knowledge and has practiced the skill (probably several times), now the situation is a critical one. Typically, when the student gets to this point in the learning guide he/she will first make a self-evaluation to decide whether the task has been sufficiently learned. Then the student makes arrangements with the instructor to observe the performance or rate the product of the test.

Selecting the Performance Test Situation

When you are developing the performance test for your learning guide you will first need to decide on the test situation. What are you going to ask the student to do that will demonstrate whether he/she has achieved the competency? As you plan for this you will need to keep the following guidelines in mind:

- The performance test should focus directly on the target competency. It should be clear to the instructor and student what is expected. Usually you will be evaluating only one competency in any one learning guide; other skills or knowledge should not intrude into the situation, unless, of course, they are basic prerequisite skills.

- The test situation should be as close as possible to the actual job situation. The same tools, equipment, and conditions should be provided. This may mean that live work, real patrons, or a field setting may be needed. In some cases you will want to specify whether a school laboratory or clinical experience is required.

- If an actual occupational situation is not possible for some reason, then you will need to devise a simulated situation as close as possible to a real one. You might use a mannequin or dummy, a role play situation, a simulator, or a model or mock-up.

- Paper-and-pencil performance tests are permissible only for paper and pencil skills. This would include such competencies as drawing up plans, scheduling, calculating, and designing.

- The performance test must be practical and feasible. It should be able to be done in a reasonable length of time, with a reasonable amount of materials and supplies (these materials and supplies should be much like those used on the job). It sometimes takes a good deal of creativity to devise realistic tests that are not too expensive or difficult to set up.

- The directions to the student should describe very simply and clearly what he/she is expected to do, what conditions must be arranged, where to find needed materials, and what restrictions apply (e.g., "Use no reference materials or other aids").

- Try to avoid involving the instructor too much in setting up the test situation; it could be very time consuming. However, you may direct the student to the instructor for special problems or materials (e.g., "Ask your instructor for a special data sheet that you will need for this problem").

- In using the performance test checklist, the instructor examines the student's product or observes the performance of the competency then responds to each of the criteria on the checklist by making a check in the YES or NO column. In some few cases, an item may be marked NOT APPLICABLE because, for example, a certain tool was not available, or a handicapped student was physically unable to meet that criterion but nevertheless could accomplish the task.

- The rating scale that appears on the performance checklist is used by the instructor after all items on the checklist have been assessed. Using the checklist results as a basis, the instructor makes a judgement of the student's overall performance of the target competency and initials the box in front of the most appropriate statement. It is this rating that is entered into the records.

Assessing Process or Product

You will have to determine on what basis you are going to evaluate the student's performance of the target competency. Is the product (or results) he/she produces the important thing, or is it the process (or method or behavior) that is the best indicator of achievement? Or is it some combination of the two?

Often, the product produced by the student is the best measure of his/her achievement of the competency. A product is something easily seen, handled, and measured--such as a tailored skirt, a computer program, or a smooth-running engine. In products like these you can state the standards clearly, objectively, and accurately; e.g., "the zipper was sewn properly," "the program was free of bugs," "the engine's exhausts met emission standards." In CBVE we try to concentrate attention on the product as much as possible because that is usually what is most important to employers.

You will want to include standards for the process the student goes through if:

- there is no tangible final product (e.g., greeting visitors to the office).
- critical hidden parts of the final product can't be seen (e.g., a surgical dressing where inner aseptic procedures are even more important than the outer bandage).
- safety procedures are extremely important.
- time or speed of completing the task must be evaluated in order to meet occupational standards.
- you are looking for evidence of desired attitudes that affect the student's behavior (e.g., greeting customers pleasantly, working cooperatively with others, showing concern for a patient's condition and comfort).

Usually, the checklist criteria will need to be a combination of product and process. It is often necessary to judge not only the final result, but to decide whether the trainee's method of operation was acceptable. Be sure, however, that the standards you write are those of the occupation, not your own personal preference or what teachers in schools might expect.

PERFORMANCE TEST

STUDENT'S NAME	DATE

COMPETENCY	TEST ATTEMPT
TYPE ADDRESSES ON ENVELOPES	1ST 2ND 3RD

DIRECTIONS

Your instructor will provide 25 No. 10 envelopes, five postal cards, and a list of mailing addresses. Type correctly the mailing addresses and return addresses using the chain feeding method. Your resource person will observe and evaluate your performance using the performance test checklist.

OVERALL EVALUATION

LEVEL ACHIEVED	PERFORMANCE LEVELS	
	5	CAN PERFORM THIS SKILL WITHOUT SUPERVISION AND WITH INITIATIVE AND ADAPTABILITY TO PROBLEM SITUATIONS.
	4	CAN PERFORM THIS SKILL SATISFACTORILY WITHOUT ASSISTANCE OR SUPERVISION.
	3	CAN PERFORM THIS SKILL SATISFACTORILY BUT REQUIRES SOME ASSISTANCE AND/OR SUPERVISION.
	2	CAN PERFORM PARTS OF THIS SKILL SATISFACTORILY, BUT REQUIRES CONSIDERABLE ASSISTANCE AND/OR SUPERVISION.
	1	CANNOT PERFORM THIS SKILL.

INSTRUCTOR WILL INITIAL LEVEL ACHIEVED

PERFORMANCE STANDARDS FOR SUCCESSFUL ACHIEVEMENT, ALL ITEMS SHOULD RECEIVE A "YES" OR "N/A" RESPONSE.	YES	NO	NOT APPL.
In the process of typing addresses on envelopes, the student:			
1. used correct style			
2. typed addresses within the area read by optical scanner equipment			
3. corrected all errors neatly			
4. used proper chain-feeding techniques			
5. typed envelopes at the rate of at least one per minute			
6. placed mailing and addressee notations correctly			
In the process of typing addresses on postal cards, the student:			
7. used correct style			
8. corrected all errors neatly			
9. typed address within the area read by optical scanner equipment			
10. used proper chain-feeding techniques			
11. typed return address in correct place			

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PAGE ___ OF ___

PERFORMANCE TEST (Cont'd)

COURSE NO.

COMPETENCY NO.

PERFORMANCE STANDARDS	YES	NO	NOT APPL.

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Guidelines for Writing the Checklist

a. Every learning guide should have a checklist for the final performance test. Without this there are no standards by which to judge the performance, and the student has no way in which to know what qualities are expected.

b. The checklist should be short enough to make it practical for the teacher to use. Perhaps five to ten items for a basic, simple skill, ten to twenty items (tops) for complex skills.

c. The items should be simple and clear. They must be quickly read and easily understood by both student and teacher.

d. Each standard or criteria should be critical or important to the competency, not trivial or routine. Don't just copy the items on a list of task procedures and call them criteria.

e. Draw on your own occupational experience and expertise (or on the expertise of others) in developing the standards. You should know what qualities of work are important on the job, and what are not so important, what supervisors would look for, what the accepted procedures and practices are. Keep occupational standards (not school expectations) firmly in mind as you write the performance checklist items.

f. Each standard should be stated so there is some judgment of quality. It is not enough to record that the student just did something; it needs to be shown whether he/she did it poorly or well, (e.g., "The cover of the report was neat and attractive," not "The report had a cover").

g. Include only those items that the teacher is actually going to be able to observe. It doesn't do much good to include an item like, "In writing the report, the student checked the spelling of unfamiliar words in the dictionary," if it isn't likely that the teacher will be there to see whether the student does that. A better idea would be to evaluate the results (e.g.,"The report was free of spelling errors"); after all, that's what is important.

h. All items must be stated in the declarative form (e.g., "The surface was smooth and free of blemishes"), not in question form (e.g., "Was the surface smooth?").

i. Use the past tense for all items (e.g., "...used appropriate tools," "...was completed in the allotted time," "...followed safety procedures"). This is because the evaluation takes place after the student performance test has been completed.

j. It is often convenient and more efficient to state some standards as a stem with several criteria, as in the following example:

The icing on the cake was:

a. smooth in texture . . . . . .
b. of proper consistency to cover top and sides of cake thickly . . .
c. attractively spread . . . . . .

APPENDIX

Appendix A: Style Sheet for Writing Learning Guides

Appendix B: Troublesome Words Used in Learning Guides

Appendix C: Sample of Complete Learning Guide
(Adapted from one produced by the Kentucky Bureau of Vocational Education)

STYLE SHEET FOR WRITING LEARNING GUIDES

The following miscellaneous rules should be followed carefully in the interest if producing learning guides that are of uniformly high quality and consistent in style. The authority for all questions of grammar, usage, and style shall be The Gregg Reference Manual, Fifth Edition, published by McGraw Hill Book Company.

- Use the term "resource person" rather than "instructor" or "teacher" when referring students to this person in the learning guide.
- Use the term "student" when referring to the learner, rather than "pupil" or "trainee."
- Use the term "laboratory" or "shop" as appropriate; not "lab."
- Use the word "school" for the place of learning, whether you expect the learning guide to be used in a secondary school, vo/tech center, or college. Don't refer to the school by name. This will make the learning guide useable in a variety of settings.
- Use the personal term "you" when writing to the learner. Avoid the impersonal form, (e.g., "The student will find this skill very useful on the job)".
- Do not use the symbols for feet (') and inches (") except on drawings, sketches, or diagrams.
- Spell out the word percent in the text. Use the % sign only on charts or tables.
- Double check the spelling of unusual or technical words. Learning guide writers are particularly responsible for technical terms; editors and typists are not likely to be able to catch errors in these.
- The numbers one through ten are written out (e.g., three, seven, nine).
- Avoid starting a sentence with a number over ten, but if you must, spell it out (e.g., Twenty-three, Forty-six, One Hundred eighty-two).
- In a phrase containing numbers under and over ten, both numbers should be numerals (e.g., from 8-16, 47 minus 3).
- Be sure to use e.g. and i.e. correctly. The term e.g. means "for example"; the term i.e. means "in other words."
- A comma should always follow e.g., and i.e.,.

- Commas go all the way through a series (e.g., potatoes, corn, peas, and barley).

- The term etc. is always set off by commas when it falls within a sentence. (You will find soap, towels, etc., in the closet.) It takes one period if it falls at the end of the sentence. (You will need soap, towels, sponge, etc.)

- Spell out technical terms the first time you use them, even if in the occupation the terms are usually referred to by their initial letters. If you follow the spelled-out form by the initials in parentheses you can use the initials only later; e.g., electrocardiogram (EKG).

TROUBLESOME WORDS USED IN LEARNING GUIDES

The following is a list of troublesome words often used in learning guides. The words are either: (1) ones that are often misspelled, or (2) ones that have alternate forms about which a decision has been made. When writing learning guides, use the forms given here.

a lot
accommodate
advanced testing
all right
apparent
artwork
audiotape (v., n.)
audiovisual
awhile

ball-point pen
bank teller
businessperson
busywork
bylaw
bypass

capitol - a building
capital - $, upper-cased letter, city seat of government, punishment
catalog
category
cellophane (not Scotch) tape
chairperson
chalkboard (not blackboard)
changeover (n.)
change over (v., adj.)
checklist
classified (not want) ads
cleanup (n., adj.)
clear-cut (adj.)
close-up (n.,adj.)
comparative
computer
conferred
conscious
controversial
coordinate
consumer
counseling
course work
cross section (n.)
cross-sectional (adj.)
cutoff (n., adj.)
cut off (v.)

data are
data-collection techniques
data-gathering techniques
data processing firm
day-care center
decision-making skills (adj.)
decision maker (n.)
decision making (n.)
definitely
desirable
DE student
"dos and don'ts" or do's and don'ts
dropout (n.)
drop out (v.)

ensure (instead of insure)
exaggerate
excel
excelled
existence
explanation
extracurricular
extra-school activities

federal (lower case)
felt-tip pen
fellow students
fiberglass
field test (n.)
field-test (adj., v.)
firsthand (adj., adv.)
follow-up (n., adj.)
follow up (v.)
format
formatted
freehand (adj.)
free hand (n.)
full-time (adj., adv.)

grade point average
grass-roots approach

half hour
halfway
handout (n.)
hand out (v.)

hardworking (adj.)
high-_____(adjs.)
 high-class
 high-grade
 high-level
 high-pitched
 high-powered
 high-pressure
 high-quality
 high-speed
 high-tension
higher-up (n.)
homemade
homemaking
in-depth (adj.)
inservice
interaction
interpersonal
interrelationship
judgment

know-how (n.)
keypunch (n. v.)

labeled
large-group instruction
left-hand side (adj.)
left-handed (adj., adv.)
left-hander (n.)
leftover (n., adj.)
liaison

mimeograph, stencil

necessary
needle trades
non+ (no hyphen)
 noninstructional
 nonverbal
 nonvocational

occasion
occurred, occurring
OK or okay
old-fashioned
one-syllable word
ongoing (adj.)
on-site activities
open-entry/open-exit programs
open-minded (adj.)
outdated (adj.)
overall (n., adj. adv.)

pamphlet
paper-and-pencil test
part-time (adj., adv.)
pigeonhole (n., v.)
pilot test (n.)
pilot-test (adj., v.)
pinpoint
policymaking (n.)
policymaker (n.)
post+ (no hyphen)
 postassessment
 postsecondary
 posttest
pre+ (no hyphen)
 preassessment
 precoded
 predetermine
 preplan
 prerecord
 preservice
 pretest
precede
prevalent
principal - administrator, primary
principle - precept
privilege
proceed
procedure

question-and-answer session

ready-made materials (adj., n.)
recall-type test item
recommend
record keeping (n.)
record-keeping device (adj.)
red tape
reevaluate
referring
reread
research base
right-hand side (adj.)
right-handed (adj., adv.)
right-hander (n.)
right side up
role-play, role-playing (n., adj.)

salesperson
satisfactorily
school-wide
short run (n.)
sizable
sized (standard-sized, popular-
 sized, normal-sized room

slide/tape
small-group instruction
state-level contest
statewide
step-by-step (adj.)
straightforward
sub+ (no hyphen)
 subcommittee
 subdivision
 subpart
 subsection
 subtopic
 subtotal
 subunit
succeed
systematic

T & I
tailor-made (adj., n.)
time-consuming (adj.)
timekeeper
time line
time-saver (n.)
timesaving (adj.)
time sheet
timetable
timeworn
transferred
tryout (n.)
try out (v.)
tv or television
two-foot board
two-minute egg
two-year study

unnecessary
upper-level position
up-to-date (before noun)
up to date (after noun)
usable

vendor
ventilation
videotape (v., n.)

well-thought-out plan
worn-out equipment (adj.)

xerographic (photo)copier or Xerox

STUDENT LEARNING GUIDE

SAND HILLS TECHNICAL INSTITUTE
WEST RUFF ROAD
LITTLEBURG, FLORIDA

ADULT VOCATIONAL CAREER EDUCATION

ORANGE COUNTY PUBLIC SCHOOLS
Orlando, Florida 32802

COURSE NO. 5385

COMPETENCY NO. 27

COURSE TITLE: CHILD-CARE WORKER

DUTY/UNIT: PERFORMING FOOD SERVICE ACTIVITIES

COMPETENCY: SUPERVISE MEALTIME ACTIVITIES

INTRODUCTION:

Mealtime should be a time of enjoyment and learning for the children in your care. You will want to help children develop independence in serving themselves, eat with good table manners, try new foods, and develop positive attitudes toward food and eating. You will also need to know how to serve food efficiently and attractively. This learning guide will help you to acquire these important skills.

PERFORMANCE OBJECTIVE:

Given access to a group of children, serve three meals or snacks and supervise the mealtime activities of the group. Your performance will be evaluated by your resource person, using the performance test checklist.

PERFORMANCE ENABLERS:

1. After completing the required learning experiences, demonstrate your knowledge of the procedures involved in supervising children at mealtime.

2. After completing the required learning experiences, demonstrate knowledge of the procedures involved in serving children meals.

3. In a day-care setting, practice working with other child-care workers and with children at mealtime.

PLEASE DO NOT WRITE OR MARK ON THE LEARNING GUIDE

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FOREWORD

This learning guide is one of a large series developed by the instructors and staff of the Orange County Public Schools. It is part of an extensive effort by the school system to implement the competency-based approach in all of its vocational programs.

The vocational program competencies were identified by a committee of instructors and validated by a specially selected group of workers in the occupational area.

ORANGE COUNTY PUBLIC SCHOOLS
Department of Vocational, Adult, and Career Education
434 North Tampa Avenue
Orlando, Florida 32802

LEARNING ACTIVITIES

COURSE NO. 5385

COMPETENCY NO. 27

PERFORMANCE ENABLER NO. 1

After completing the required learning experiences, demonstrate your knowledge of the procedures involved in supervising children at mealtime.

LEARNING EXPERIENCES	SPECIAL INSTRUCTIONS/RESOURCES
Read Brisbane, The Developing Child, pp. 188-190 and 273-276. Read Baker and Fane, Understanding and Guiding Young Children, pp. 83-85 and 111-112. Read Draper, Caring for Children, pp. 206-209. Read Instruction Sheet 1, "Planning and Guiding Mealtime Activities." Demonstrate your knowledge of supervising children's mealtime activities by completing Self-Check 1, "Do's and Don'ts of Supervising Snack and Mealtime Activities."	You may wish to listen to the audiotapes of these readings. You will find them in the resource center.

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LEARNING ACTIVITIES

COURSE NO. 5385

COMPETENCY NO. 27

PERFORMANCE ENABLER NO. _____

LEARNING EXPERIENCES	SPECIAL INSTRUCTIONS/RESOURCES

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PLANNING AND GUIDING MEALTIME ACTIVITIES

A. Planning

1. Plan a quiet activity preceding snack time or mealtime activities to help calm the children and prepare them for coming to the table quietly.
2. Give advanced warning that the meal is to be served so that the children have time for one more turn, or to put up the toys and to wash their hands.
3. Aid children in washing and drying their hands only if it is necessary. Encourage them to develop independence in completing this task. Praise their efforts.
4. See that everyone is comfortable at the table with a chair that fits both the table and the child. When the child is seated his/her forearm should be level with the top of the table and feet should rest securely on the floor.
5. Encourage responsibility on the part of the children by assigning them duties at snack time.

B. Guiding Techniques

1. Food tastes better and appetites are keener when meal and snack times are pleasant.
2. Be patient with the child's effort at table manners.
3. Set a good example by practicing correct table manners and being quiet.
4. Be relaxed, talk only about interesting and pleasant happenings, and encourage everyone to talk.
5. Encourage each child to try new foods and praise those who eat new foods.
6. Be sympathetic to food dislikes; don't force a child to eat a food and don't make an issue of it when he/she doesn't eat a certain food.
7. Encourage each child not to waste food, but don't push children to eat more than they actually want.
8. Encourage each child toward independence in serving and eating by allowing him/her to take seconds when possible.
9. Cut up the food for the children only if they can't manage it themselves.
10. Give children opportunities to be helpful by allowing them to wipe up spills. Give assistance only if necessary.

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INSTRUCTION SHEET

PERFORMANCE ENABLER NO. 1

COURSE NO. 5385

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11. Do not hurry the mealtime.

12. Be firm, but courteous. Calm noisy children. Watch disorderly children carefully to prevent accidents. Attempt to anticipate difficulties before they happen.

13. Use positive guidance phrases, such as "We eat with our forks" and "We swallow our food before talking."

14. Encourage responsibility on the part of children if they are to return trays and dishes to their proper place.

15. Don't use dessert as a bribe, a reward, or as a punishment.

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SELF-CHECK 1

PERFORMANCE ENABLER NO. 1

COURSE NO. 5385

COMPETENCY NO. 27

DIRECTIONS

Check your knowledge of good techniques for supervising childrens' mealtimes by responding to the following statements. Write "do" in front of the statement that is correct and "don't" in front of the statement that is an incorrect procedure. Check your answers with those on the next page.

DO'S AND DONT'S OF SUPERVISING SNACK AND MEALTIME ACTIVITIES

_____1. Direct the child to "clean up" his plate.

_____2. Give the children a chance to calm down before mealtime by reading a story.

_____3. Allow the child to eat whatever he/she likes.

_____4. Tell children they can't have dessert if they use incorrect table manners.

_____5. Require each child to take one bit of each new food that is offered.

_____6. Give the child an opportunity to serve himself/herself.

_____7. Cut up each child's meat before you begin.

_____8. Practice strict discipline at the table.

_____9. Be pleasant, cheerful and relaxed with the children during mealtime.

____10. Take the opportunity of mealtime to tell children about the illness of a missing child or about misbehavior problems.

____11. Assist all children in thoroughly washing and drying their hands to make sure they are clean before eating.

____12. For comfort, make sure each child is seated in a chair that is the right height.

____13. Encourage responsibility in the children by letting them take their tray or dishes off the table.

____14. Use positive guidance phrases that tell the child "what to do" rather than "what not to do."

____15. Take as little time for meals as possible in order to get back to more important activities.

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SELF-CHECK ANSWER SHEET

PERFORMANCE ENABLER NO. 1

COURSE NO. 5385

COMPETENCY NO. 27

ANSWERS TO SELF-CHECK 1:

1. don't
2. do
3. do
4. don't
5. do
6. do
7. don't
8. don't
9. do
10. don't
11. don't
12. do
13. do
14. do
15. don't

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LEARNING ACTIVITIES

COURSE NO. 5385

COMPETENCY NO. 27

PERFORMANCE ENABLER NO. 2

After completing the required learning experiences, demonstrate knowledge of procedures involved in serving children meals.

LEARNING EXPERIENCES	SPECIAL INSTRUCTIONS/RESOURCES
Read Draper, Caring for Children, pp. 216-217, and 358-362.	You may wish to listen to the audiotapes of these readings. You will find them in the resource center.
Read Barclay and others, Teen Guide to Homemaking, pp. 466-470.	
Read Instruction Sheet 2, "Tips for Meal Service for Children."	
View the videotape, CW-6, "How to Get Children to Try New Foods."	If you need help in setting up the videotape playback unit, ask your resource person for assistance.
Visit a child-care center and observe children being served snacks and/or a meal. Record your observations on the form in Instruction Sheet 3, "Observation Form for Mealtimes."	Ask your resource person to help you arrange for a visit to an appropriate child-care center. Complete the observation form immediately after leaving the center, not in the presence of the child-care workers.
To check your knowledge of serving snacks and meals, write a brief paper listing five or more ways in which you would attempt to make mealtime more attractive or beneficial to the children in the setting you visited.	Arrange with your resource person to discuss your visit and review your paper with you.

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LEARNING ACTIVITIES

COURSE NO. 5385

COMPETENCY NO. 27

PERFORMANCE ENABLER NO. _____

LEARNING EXPERIENCES	SPECIAL INSTRUCTIONS/RESOURCES

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TIPS FOR MEAL SERVICE FOR CHILDREN

1. Serve food at a scheduled time because following a fairly regular eating routine is good for the child.
2. Serve foods in a form a child can easily handle, keeping in mind the child's hand and chewing skills.
3. Introduce new foods in small amounts and one at a time. Serve a new food along with something they like.
4. Serve small portions and allow an opportunity to have a second helping.
5. Use child-size dishes and utensils and flat bottom mugs.
6. Plan for variety in foods. Children like colorful foods. A garnish can add a touch of bright color and pep up a colorless plate.
7. Offer a variety of shapes and sizes. Sandwiches cut in interesting shapes have more child appeal and are easier for the child to handle.
8. Offer a variety of tastes such as mild, tart, bland, sweet, salty, and sour. Children are often more sensitive to strong flavors than adults so it is best not to plan more than one strongly flavored food in a meal.
9. Don't fry a child's food or cook it with a lot of seasoning.
10. Offer sweets only at the end of the meal.
11. Arrange the food on the plate for eye appeal and ease in eating.
12. Offer the foods in a variety of forms. Menus may be varied by preparing foods in different ways. Children like to be able to identify foods they eat.
13. Serve hot foods hot and cold foods chilled.
14. Serve plates from the left of the child with your left hand. Place beverages from the right with your right hand. This will help avoid accidents and with practice this established routine adds to the ease of service.
15. Use care to avoid accidents in serving food. If an accident occurs wipe it up without comment. Don't scold the child for moving and making you spill food.

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INSTRUCTION SHEET

PERFORMANCE ENABLER NO. 2

COURSE NO. 5385

COMPETENCY NO. 27

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OBSERVATION FORM FOR MEALTIMES

Child-Care Center _____ Date of Visit _____

Student's Name _____

Directions: Use this form to guide your visit to the child-care center. Before you go on your visit read all the items carefully so you will know what to look for. Immediately after you leave the child-care center, jot down notes, comments, and observations in the space provided under each item.

SERVING FOOD

1. How was the food obtained from the kitchen?

2. How did the children help in serving the food?

3. What types of dishes and utensils were used?

4. What size portions of food were served?

5. When and how were second helpings given?

6. What procedures were used to avoid accidents?

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INSTRUCTION SHEET

COMPETENCY NO. 27

COURSE NO. 5385

PERFORMANCE ENABLER NO. 2

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PERFORMANCE ENABLER NO. 2

COURSE NO. 5385

COMPETENCY NO. 27

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INSTRUCTION SHEET

PERFORMANCE ENABLER NO. 2

COURSE NO. 5385

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7. Note the ways in which variety in foods was achieved.

   a. Garnish

   b. Color

   c. Texture

   d. Shapes

   e. Flavors

MEALTIME ACTIVITIES

8. Place a check in front of the before-mealtime procedures you were able to observe.

   _____ Quiet activity

   _____ Advance notice of mealtime

   _____ Assistance or supervision of washing hands

   _____ Assistance or supervision of seating the children

   Comments on your observations:

9. Place a check in front of the procedures for supervising mealtime you were able to observe.

   _____ Food served at scheduled time

   _____ Relaxed atmosphere established

   _____ Children guided toward independence in serving and eating

   _____ Children were not rushed

   _____ Adults set good example of correct table manners

   _____ Adults were patient with childrens' table manners

   _____ Adults assisted children in wiping up skills

   _____ Adults used positive guidance techniques

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Comments or examples on how any of the above were accomplished:

10. Place a check in front of the procedures for helping children develop positive attitudes about food and eating that you were able to observe.

_____ Children were encouraged to eat

_____ New foods were introduced in small amounts and one at a time

_____ Children were encouraged to try new foods

_____ Adults set good examples by showing enjoyment of food

____ Adults praised children who ate new foods

_____ Children were encouraged not to waste food

_____ Children were not forced to eat

Comments or examples on how any of the above were accomplished:

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INSTRUCTION SHEET

PERFORMANCE ENABLER NO. 2

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LEARNING ACTIVITIES

COURSE NO. 5385

COMPETENCY NO. 27

PERFORMANCE ENABLER NO. 3

In a day-care setting, practice working with other child-care workers and with children at mealtime.

LEARNING EXPERIENCES	SPECIAL INSTRUCTIONS/RESOURCES
Help to organize the area for snack time during a playschool or at a day-care center. In an actual child-care center, assist other workers in serving meals and supervising children. Check your ability to serve meals and supervise children by completing Self-Check 2, "Mealtime Activities Checklist." Arrange with your resource person to complete this learning guide by going through the performance test for this competency.	Arrange for time and place to work in cooperation with your resource person.

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LEARNING ACTIVITIES

COURSE NO. 5385

COMPETENCY NO. 27

PERFORMANCE ENABLER NO. _____

LEARNING EXPERIENCES	SPECIAL INSTRUCTIONS/RESOURCES

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SELF-CHECK 2

PERFORMANCE ENABLER NO. 3

COURSE NO. 5385

COMPETENCY NO. 27

DIRECTIONS

After you have assisted at mealtimes in a day-care center, evaluate yourself on your ability to supervise mealtime activities by completing the self-check. After each item, place an X in the box that best describes your accomplishment. If a performance element was not applicable, or impossible to accomplish, place an X in the N/A box.

	LEVEL OF PERFORMANCE			
	N/A	NO	PARTIAL	FULL
<u>When serving food to children you:</u>				
1. helped serve the food on time and at the proper temperature				
2. got children involved in serving the food				
3. served proper portions				
<u>When supervising children at mealtime you:</u>				
4. helped organize the area for mealtime				
5. helped children with handwashing				
6. established a comfortable and relaxed atmosphere at your table				
7. set an example by using good table manners				
8. assisted children in wiping up spills				
9. encouraged children to try new foods				

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SELF-CHECK ANSWER SHEET

COMPETENCY NO. 27

COURSE NO. 5385

PERFORMANCE ENABLER NO. 3

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PERFORMANCE TEST

STUDENT'S NAME	DATE

COURSE NO. 5385

COMPETENCY NO. 27

COMPETENCY
SUPERVISE MEALTIME ACTIVITIES

TEST ATTEMPT
1ST 2ND 3RD

DIRECTIONS
Your resource person will assign you a group of children. (1) Serve three meals or snacks to this group. (2) Supervise the group at snack and/or mealtime on three separate occasions. Your resource person will observe and evaluate your performance using the performance test checklist.

OVERALL EVALUATION

LEVEL ACHIEVED	PERFORMANCE LEVELS
	5 CAN PERFORM THIS SKILL WITHOUT SUPERVISION AND WITH INITIATIVE AND ADAPTABILITY TO PROBLEM SITUATIONS.
	4 CAN PERFORM THIS SKILL SATISFACTORILY WITHOUT ASSISTANCE OR SUPERVISION.
	3 CAN PERFORM THIS SKILL SATISFACTORILY BUT REQUIRES SOME ASSISTANCE AND/OR SUPERVISION.
	2 CAN PERFORM PARTS OF THIS SKILL SATISFACTORILY, BUT REQUIRES CONSIDERABLE ASSISTANCE AND/OR SUPERVISION.
	1 CANNOT PERFORM THIS SKILL.

INSTRUCTOR WILL INITIAL LEVEL ACHIEVED

PERFORMANCE STANDARDS FOR SUCCESSFUL ACHIEVEMENT, ALL ITEMS SHOULD RECEIVE A "YES" OR "N/A" RESPONSE.	YES	NO	NOT APPL.
When serving food to children the student:			
1. served food at the regularly scheduled time			
2. served the food efficiently and smoothly			
3. assisted the children in serving food when appropriate . . .			
4. used garnishes to make the food more attractive			
5. served correctly-sized portions			
6. provided second helpings when they were asked for			
While supervising snack or mealtime activity the student:			
7. provided suitable activities prior to mealtime			
8. organized the area for snacktime			
9. allowed children sufficient handwashing time			
10. established a comfortable and relaxed atmosphere during mealtime			
11. guided children toward independence in serving and eating . .			
12. allowed children sufficient time for mealtime			
13. set an example by using acceptable table manners			
14. assisted children in wiping up skills			

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PERFORMANCE TEST (Cont'd)

COURSE NO. 5385

COMPETENCY NO. 27

PERFORMANCE STANDARDS	YES	NO	NOT APPL.
15. encouraged children to try new foods			
16. assigned the children duties during snacktime			

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